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ABSTRACT

The 13 papers archived here represent a sampling of the 23 presentations approved for the Japan Conference on English for Specific Purposes (ESP): "An Overview of ESP in the 1990s" (Tony Dudley-Evans); "'Easifying' ESP Texts for EFL Science Majors" (Judy Noguchi); "From Non-Communicative Exercises to Technical Writing: Profile of a Two-Semester Preparatory Sequence" (Doug Sawyer); "E-Mail in the Business World: Issues for Teachers of ESP" (John Bauman); "Assessment Dilemmas in a Language and Cross-Cultural Training Program" (Tom Hayes, Jane Cargile); "Collaborative Interaction in Networked Writing Classrooms: The Student Experience" (Tim Roskams); "Nursing Matters" (Charles Adamson); "Student Recommendations for ESP Curriculum Design" (Kin'ei Yoshida); "Preaching to Cannibals: A Look at Academic Writing in Engineering" (Laurence Anthony); "Simulation and Collaborative Learning in Political Science and Sociology Classrooms" (Sandra Peters, Deborah Saxon); "A Sociolinguistic Analysis of Doctor-Patient Communication" (Margaret Simmons); "Phonological Consciousness Raising Tasks for the ESP Classroom" (Peter Sterlacci); and "Integrating ESL into the Art History Classroom" (Sandra Peters, Deborah Saxon). (MSE)

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Edited by
Thomas Orr

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Editor's Forward

On November 8, 1997, roughly 70 participants from Japan and abroad gathered at the University of Aizu in Fukushima Prefecture for Japan's first major conference devoted solely to ESP. Working under the conference theme *English for Specific Purposes: Present Circumstances, Future Needs*, participants listened to speeches and presentations, questioned panelists, and discussed issues of concern with each other in an attempt to better understand ESP and consider how it might be applied more effectively in Japan.

The plenary was given by Tony Dudley-Evans, one of the editors of *English for Specific Purposes: An International Journal* and a popular thesis advisor for teachers working toward master or doctoral degrees in ESP from the University of Birmingham in England. The intent of the speech was to define ESP for conference participants and describe activities that characterize the work of ESP. Following the plenary was a panel discussion comprised of three members: Tony Dudley-Evans (the keynote speaker), Morijiro Shibayama (director of JACET's ESP SIG), and Kin'ei Yoshida (a university student currently enrolled in an ESP program). Prior to the discussion, Dr. Shibayama gave a short presentation on the growth of interest and research in ESP within the JACET organization, and then Mr. Yoshida, a sophomore at the University of Aizu, spoke on preliminary results from his research into student responses to and recommendations for a university ESP program serving students in computer science and engineering. Fourteen additional papers were delivered by ESP educators working at universities or in major corporations in disciplines as diverse as medicine, engineering, art history, computer science, political science, sociology, and business.

Two major goals for the conference were to significantly advance professional networking among ESP specialists in Japan and to provide some direction for the ESP movement that has just begun to gain momentum here. Both of these goals were achieved and prompted the creation of ESP-J, a national resource site for ESP specialists in Japan,[1] and the ESP-J Digital Forum, a national ESP discussion list.[2] Further professional activity is also being considered, such as an annual ESP conferences and/or seminars and one annual refereed publication.

The papers archived here in the conference proceedings represent a sampling of the 23 presentations approved for this conference by a team of 5 international referees and 3 University of Aizu faculty members from an original pool of 28 proposals and 3 invited presentations. To our great regret, funding obstacles, unexpected personal problems, and various other matters prevented several very fine speakers from attending the conference and/or submitting papers for publication in the proceedings. It is our hope, however, that the articles included in this publication will be sufficiently stimulating to our readers and applicable to their work or study of English for Specific Purposes.

For the most part, each article appears as it was submitted by the author(s). Only minor editorial changes have been made in the mechanics and formatting of the articles. The language and content remain in their original form.

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[1] http://www.u-aizu.ac.jp/~t-orr/esp-j.html

[2] To subscribe, send e-mail to **Majordomo@happi.nagaokaut.ac.jp**, leave the subject line blank, and type **subscribe esp-j (your e-mail address) end** as your message.

Acknowledgements

We express our warmest gratitude to the following international ESP experts for refereeing our conference proposals in a timely and professional manner. Names of applicants and institutions were withheld to preserve professional ethics, and thus approval for presentation in the conference and publication in the proceedings was based purely on the quality of proposal content. The names of our distinguished referees appear below.

- **Robert M. Chandler-Burns, Ph.D.**, is Professor of English for Medical Purposes and Chair of the Department of Modern Languages at the College of Medicine, Autonomous University of Nuevo Leon, in Monterey, Mexico. He is also Editor of English for Medical Purposes and authors numerous papers on EMP.
- **Joan Friedenberg, Ph.D.**, is Professor of Linguistics at Southern Illinois University (Carbondale, Illinois, USA) and Chair of TESOL's ESP Interest Section. Her research concentration includes English for vocational purposes.
- **Virginia Hussin, M.Ed.**, teaches in the Faculty of Health Sciences at the Flinders University of South Australia. She has taught ESP to scientists in China and to teachers, nurses and doctors in Australia.
- **Monique Memet, Ph.D.**, is Senior Lecturer of ESP at the Universite de Pantheon-Sorbonne in France, Editor of Cahiers de l'APLIUT, and author of numerous articles on ESP and language teaching.
- **Mark Peterson, M.A.**, is Lecturer at the Japan Advanced Institute of Science and Technology, a national graduate school in Ishikawa Prefecture, Japan. His specialization is hypertext courseware for English instruction in the science and technologies.

In addition, I personally would like to thank Assistant Professor Doug Sawyer for his excellent work as Associate Conference Chair, Professor John Izzo for his assistance with refereeing conference proposals, Center for Language Research secretaries Katsuko Kuwada and Keiko Makishima for their work behind the scenes and at the registration desk, and University of Aizu freshmen Keisuke Kokubun, Ken'ichi Saito, and Takanobu Watanabe for their assistance with set up, clean up, and miscellaneous technical duties. I also extend my thanks to Professor Nikolay Mirenkov, Mr. Shuji Meike, and all the other members of the University of Aizu International Affairs Committee, for their funding of our keynote speaker, and to Professor Hisako Murakawa, Director of the Center for Language Research at the University of Aizu for her advice and support throughout this entire project. Last of all, I thank all those who submitted proposals, presented papers, and attended our conference for your hard work and enthusiasm for ESP.

Sincerely,

Thomas Orr
Conference Chair and Proceedings Editor
University of Aizu, Japan

An Overview of ESP in the 1990s

Tony Dudley-Evans
The University of Birmingham, England

Introduction

English for Specific Purposes is one of those activities where practitioners are so concerned with keeping up with the work and with discussing recent developments that they do not make time to define in any kind of detail exactly what they are doing. I propose to begin this short discussion of the current state of ESP with an attempt at a comprehensive definition of ESP.

We should first look at the question of *needs analysis*. Needs analysis remains fundamental to ESP and from the early days of ESP in the 1960s the starting point has always been what learners need to do with English. Learners may have an educational need or a professional need. For example, a NNS medical student whose first language is not English but is studying medicine through English is likely to use English to read textbooks and articles in English, to write case reports and examination answers, to listen to lectures and to participate in group discussion. These are educational needs. A practising doctor, however, will use English for consultation with patients, i.e. asking appropriate questions, giving opinions, giving reassurance, or in the case of doctors conducting research, for attending conferences, i.e. for giving papers, writing up papers for publication. These are professional needs.

A definition of ESP, however, requires much more than an acknowledgement of the importance of needs analysis. The establishment of needs is based on the activities that the learner has to perform in English, but this is only the first step; once we know which skills are needed and what activities learners will be engaged in, we need to carry out a more focused analysis of the genres and language involved in each of these skills and activities. We also need to establish what the underlying methodology of the discipline or profession of the learners is; this is because ESP is most effective when it makes use of the methodology that learners are familiar with in their educational studies or professional work. In other words, if learners are studying or working in engineering, the ESP course can make use of the problem solving methodology of engineering. If, by contrast, learners are working in or studying business, the case study approach will be familiar and can be used in the ESP class.

We see these three aspects, i.e., needs analysis, the analysis of genres and language related to these needs, and the use of the methodology of the disciplines or professions it is is serving for at least some of the time in materials in the classroom, as the absolute characteristics of ESP that distinguish it from other branches of English Language Teaching. There are a number of additional features that are often associated with ESP but cannot be seen as defining features. For example, ESP work is often designed for learners who have already begun to study English and are at an intermediate or even advanced level. However, ESP courses can in certain circumstances be designed for near beginners and certainly for false beginners (learners who have learnt very little from a taught course). Similarly, most ESP learners are adults, but some study ESP in the secondary school. We follow Strevens (1988) in seeing these as variable characteristics.

A comprehensive definition should then list both absolute and variable characteristics. In a forthcoming book (Dudley-Evans & St. John, 1998), we give the following definition:

Absolute Characteristics

- ESP is designed to meet specific needs of the learner.
- ESP makes use of the underlying methodology and activities of the disciplines that it serves.
- ESP is centered on the language appropriate to these activities in terms of grammar, lexis, register, study skills, discourse and genre.

Variable Characteristics

- ESP may be related to or designed for specific disciplines.
- ESP may use, in specific teaching situations, a different methodology from that of General English.

ESP is likely to be designed for adult learners, either at a tertiary level institution or in a professional work situation. It could, however be designed for learners at secondary school level. ESP is generally designed for intermediate or advanced students. Most ESP courses assume some basic knowledge of the language system.

Subject Specific ESP

One point in the variable characteristics above should be clarified. It is a commonly held misconception that all ESP teaching and materials are specific to a particular discipline or profession, e.g., English for Physics, or English for Lawyers. While I believe that subject-specific teaching plays an important role in ESP, it is a mistake to consider that the term ESP should only be used when subject-specific work is involved. Where the focus in the class is on common-core skills or genres that belong to any discipline or profession, this is as much as ESP class as the more specific work. In this regard it is useful to distinguish English for General Academic Purposes (EGAP) and English for General Business Purposes (EGBP) from English for Specific Academic Purposes (ESAP) and English for Specific Business Purposes (ESBP), but they should all be seen as part of a broadly defined ESP.

A final point remains to be clarified. If a subject such as medicine or computing is taught in English, this is not in itself ESP teaching; it is content teaching. ESP has to involve the teaching of the language and the skills associated with a range of disciplines in the case of EGAP or one discipline in the case of ESAP. Materials will be devised based on the analysis of particular lexis and genres used by the discipline. The primary purpose is not to teach the subject content, but to provide learners with sufficient awareness of language, rhetoric and study skills to enable them to learn the subject content.

Roles of the ESP Teacher

The definition of ESP leads us into a discussion of the roles of the ESP teacher. Dudley-Evans and St. John suggest that there are five key roles:

1. Teacher
2. Course designer and materials designer
3. Collaborator
4. Researcher
5. Evaluator

We will look at each one of these in turn.

Teacher

The ESP teacher will clearly teach language. This will include the common-core lexis of the academic or professional worlds, and the language related to the key genres that learners will need to be able to use. But ESP teaching goes beyond teaching just language, it also involves teaching skills involved in the macro-skills of reading, writing, listening and speaking, such as the importance of listening or reading for meaning, the importance of writing for an audience, and developing learners' awareness of communicative strategies involved in the activities that they undertake. Training of ESP teachers should concentrate on both these areas and the ESP teachers need to take themselves seriously as specialists in the area of communication. A good ESP teacher is aware of the processes of the main macro-skills and of the way that a discipline or profession makes use of certain genres in their activities. We cannot expect the ESP teacher to be an expert in all these areas, but a curiosity about and a willingness to explore the ways in which professionals communicate and how these involve language is essential.

Course Designer and Materials Provider

The ESP teacher is usually responsible for selecting teaching materials for the ESP class. This will involve choosing an appropriate course book or set of materials when these exist, adapting an existing textbook or set of materials to make them suitable for use with a particular group, or writing material where no appropriate material exists.

The range of commercially available ESP materials varies; in the area of Business English a considerable amount of good material has been published in recent years. In EAP there is material available but there have been few new courses published in recent years. Very little subject specific material exists and it is here that ESP practitioner may need to devise their own. The term 'materials provider' was specifically chosen to emphasize our view that the ESP teacher should survey what is available, select units from a number of coursebooks adapting these if necessary, and write a number of extra units. Only where no suitable material is available should a whole set of new material be written.

Collaborator

I believe that it is essential that the ESP teacher enters into a dialogue with subject teachers in the academic world of professionals in the world of work. Part of the responsibility (and in my opinion a source of job satisfaction) of the ESP teacher is a willingness to engage with the disciplines or professions.It is of course possible to be successful as a ESP teacher without engaging in this dialogue, but this can only be done where all the preliminary work finding out above the learners' needs and the context of their learning has already been carried out.

There are three stages in the process of engaging with the learners' discipline or profession. The first is cooperation, which involves finding out above learners' courses or work activities, the skills that they will need and the genres that they will use. This is essentially the same as needs analysis but may also involve a willingness to integrate the work of the ESP class with the subject course or the professional activity, and to draw on the content of the courses or work. The second is collaboration where the ESP teacher and the subject specialist work together to prepare materials for use in the ESP class. The subject specialist will provide texts or recordings for exploitation, or advise on questions or activities. Team teaching takes this a stage further and involves the language teacher and the subject specialist working together in the classroom to help learners with specific activities such as lecture comprehension, assignment or dissertation writing or whatever is required of them in their academic or professional context.

Evaluator

The ESP practitioner will be involved in two kinds of evaluation, the testing of learners' achievement during and at the end of a course and also whether the learner has the requisite skills to undertake an academic course in English or a particular career that requires a good mastery of English. The second of these - assessing a student's potential for studying in English - is important in countries such as Britain, USA, Australia and New Zealand where considerable numbers of international students come to study at both undergraduate and postgraduate levels. A number of internationally recognised and validated exist for this purpose, namely the British and Australian IELTS examination, the British Northern Examination and Assessment Board's Test in ESOL and the American TOEFL. The IELTS Test and the Test in ESOL have an ESP focus, but not the TOEFL test.

Evaluation of courses and teaching materials should be carried out both during and at the end of the course. However, given that ESP courses are concerned with needs that relate to academic or professional purposes that follow on from the ESP course, it is important to gauge learners' ability to transfer what they have learnt on the ESP course to the actual activities that they have to carry out in English and to ask whether on the basis their actual experience in using English they feel that the ESP course has helped. Six months after the ESP course when learners are fully engaged in their academic course or their profession may be a good time to ask about the effectiveness of the ESP course and what additional aspects it should cover.

This discussion of the roles of the ESP teacher may seem a little daunting for teachers about to embark on ESP work for the first time. ESP work is probably more demanding that general ELT teaching, but the variety of the work and the contact with the learners' disciplines or professions provides an interest and a stimulation that is not necessarily present in other branches of ELT. I have already stated that the ESP teacher needs a certain curiosity about subject matter. I also believe that the ESP teacher often needs to act as a kind of consultant to the learners; they bring their subject knowledge, teachers bring their knowledge of the language system and of discourse. The working out in the classroom of how exactly learners can tackle the tasks expected of them can be difficult and challenging but in my opinion it is this challenge that makes ESP teaching interesting. ESP teaching should involve thinking on one's feet and also risk taking in the classroom.

I have emphasised that the ESP practitioner has a role as a researcher or at the very least in keeping up with the growing amount of research being published, especially in the field's main journal English for Specific Purposes. Two aspects of text analysis have gained particular prominence in recent years: genre analysis (Swales, 1990; Bhatia, 1993) and data driven learning (Johns, 1994).

The work in genre analysis associated particularly with John Swales has had a tremendous influence on ESP teaching and materials production. The analysis of writers'(or speakers')strategies for persuading the reader(or listener)of the validity of their claims and arguments and the categorisation of a set of 'moves' (Swales, 1981, 1990) that are regularly used to implement these strategies have provided a way into teaching both the 'higher level' strategies and the 'lower level' linguistic forms. Genre analysis is a very powerful tool that enables the teacher to understand and teach the appropriate rhetoric at the same time as the appropriate language.

Much recent work in genre analysis has concentrated on the 'higher level' aspects of academic stance (Berkenkotter & Huckin, 1995; Swales & Feak, 1994). Researchers have investigated issues such as what features seem to help a research proposal receive approval, why and how authors relate their own research to previous work in the field, whether they should acknowledge the limitations in their own research. These aspects of genre knowledge are vital for postgraduate students and young academics learning to write in English. But they also need help with the 'lower level' features such as the lexis and grammar (e.g., choice of reporting verb and tense in citation) and a range of lexical phrases typically used to express moves (e.g., the use of phrases such as the data are consistent with previously reported data to comment on experimental results). In this regard data driven learning has much to offer.

Johns (1994) has developed a technique for helping students learn from mistakes in lexical choice. Where the choice of a lexical item seems unnatural, he prints out concordance lines of the lexical item to show its correct use. He then prints out concordance lines to show the use of an alternative more natural lexical item. The following example where *presents some insight* is substituted for *offers some insight* comes from Johns' web page (http://sun1.bham.ac.uk/johnstf/revis012.htm).

The example is located on the next page.

This Kibbitzer is based on a suggested correction to the dissertation of a Farsi-speaking student of Economics:

Original	Revision
The variation of these ratios presents some insight about the financial intermediary role of banks.	The variation of these ratios offers some insight into the role of banks as financial intermediaries.

What attracted attention in the original was the slight oddity of the collocation **present + insight(s)**. We could find no example of this collocation in my data, while there were several examples of **offer + insight(s)** (with incidentally, the preposition **into**):

1 Scott-type inquiry is a mouthwatering one, **offering an insight into** the detai
2 ts own accord." Mr Aleksashenko's analysis **offers an insight into** the mess of
3 ersome fielding. Illingworth was unable to **offer any insight into** what other
4 ve Coogan, can make his creation last will **offer fascinating insights into** th
5 his vital and energetic performance, which **offered fresh insights** and perspec
6 its yolk and white, the rotation of nuclei **offers insights into** their fluid p
7 ard Williams nor the staging of Tom Hawkes **offered insights** or any justificat
8 t the writing is there from the first page, **offering insights into** Mammon . .
9 pe was her inspiration. This retrospective **offers new insight into** an artist
10 ry of the crumbling Maitland. But the show **offers no insight into** the reasons
11 es had been lost all those years but which **offered no insights** into why nativ
12 ve to say it's probably my mother.' Having **offered the insight** he has little
13 of specialisms on their own terms, and to **offer them insights** from other fie
14 There is little sense that rationality can **offer us insight** and progress into
15 tions for which there is no need. The book **offers useful insights** and will in

Offering insights (which may be fascinating (4), fresh (5), new (9) or useful (15)) is clearly more tentative and more modest than the activities associated with **present**: for example **presenting findings** (typically performed for an audience (16), at a conference (21 & 22) or meeting (25)):

16 tions, record findings, interpret data and **present findings** for different aud
17 pported the method used by the Guardian to **present findings**, but doubted whet
18 they can swop problems," said Dr Kahn, who **presented his findings** to the Scot
19 t immunity certificates. This inquiry will **present its findings** later this ye
20 s health by Global Sports Marketing, which **presented its findings** to clubs at
21 titute responsible for organising it will **present its findings** at a conferen
22 were in work. The campaign group, which **is presenting its findings** at a confe
23 asury's Economic Secretary, is also due to **present the findings** of a review i
24 wed as exceptional," said Fiona Smith, who **presented the findings** to the Inst
25 sity of Michigan geo-chemistry student who **presented the findings** to the annu
26 that Dr Sutcliffe and other experts would **present their findings** next month
27 ection group SOS Mata Atlantica. The group **presented the findings** of a five-y

Conclusion

In this short paper I have attempted to define ESP itself and the roles of the ESP practitioner emphasising that the role goes beyond teaching. We have also illustrated some parts of recent research in ESP. I am aware that the role outlined in this paper will seem a very broad and demanding one. I hope that it does not appear too broad and too daunting. Those just beginning to teach ESP will almost certainly focus on the first two roles I have outlined: the ESP practitioner as teacher and the ESP practitioner as course designer and materials provider. As the practitioner gains experience and confidence, then s/he will begin to take on the other roles. In this way the role becomes certainly more challenging but also more stimulating and satisfying. It also becomes a very different role from that of the general ELT teacher.

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"Easifying" ESP Texts for EFL Science Majors

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Abstract

An ESP text embodies structure and conventionalized features which play important roles in its message to members of the discourse community. This means that such a text should not be simplified or otherwise subjected to loss of its generic integrity. And yet these texts are often very difficult for undergraduate university students in an EFL situation who need to be introduced to such texts in what will very likely be one of their last formal English-language courses before they enter their chosen discourse community. To deal with this dilemma, Bhatia suggests the "easification" of ESP texts [Bhatia, V. K. (1993). *Analysing genre: Language use in professional settings.* London and New York: Longman]. Here this idea is extended to texts for students majoring in pharmaceutical sciences.

Introduction

"Language varies as its function varies; it differs in different situations" stated Halliday, McIntosh and Strevens as long ago as 1964, and this concept is useful for studying the language of science and technology. More than thirty years later, Bex (1996) continuing in the same tradition, discusses textual variety in a range of texts from a British Railways sign in train toilets (p. 69) to advertisements and literature.

In early work on the discourse of science, Selinker, Lackstrom and Trimble (1973) investigated "the relationship between grammatical choice and rhetorical function in written English for Science and Technology." Much of this work, such as on the use of tense and articles, was done to develop materials for teaching how to read and write this type of language. However, some erroneous assumptions arose. For example, definition statements were considered to be important for the language of science and technology, but Swales (1981) pointed out that such statements were only used in textbooks and examinations, not in scientific academic writing. Other mistaken assumptions came from the field of English composition. The use of the active voice is often encouraged rather than the passive, but this ignores the reason that the passive is often used in the sciences (for example, in the Materials and Methods section of a journal article, it implants the impression that it is the procedure, not the scientist conducting it, that is important). Still another problem arises with the use of hedging, which may be frowned upon in an English composition essay but again is indispensable in the sciences (Hyland, 1996).

Genre Analysis

What was needed was the combination pointed out by Bhatia (1993): discourse analysis + a model rich in socio-cultural, institutional and organization explanation. And this was offered by Swales (1981, 1985, 1990) [as described in Bhatia 1993, p. 13]:

> Genre "is a recognizable communicative event characterized by a set of communicative purpose(s) identified and mutually understood by the members of the professional or academic community in which it regularly occurs. Most often it is highly structured and conventionalized with constraints on allowable contributions in terms of their intent, positioning, form and functional value. These constraints, however, are often exploited by the expert members of the discourse community to achieve private intentions within the framework of socially recognized purpose(s)."

This genre analysis approach to ESP texts can be a powerful tool to help initiate students into the types of texts they will encounter in the discourse community they are aiming to join.

Language-Learning Task

Now let us consider the question of what can be done in the EFL classroom. Bhatia (1993) states that "simplification" of the material is not the answer (p. 195-196):

> Sometimes one is tempted to compromise generic integrity of a particular text in order to make it more readily accessible to the learner by applying a variety of simplification procedures to produce simplified texts or simple accounts; however, all these procedures can be counter-productive in typical ESP situations...simplification involves expansion as a result of paraphrasing and detransformation, which invariable flattens out information distribution in simplified versions.... Simplification...may obscure or even destroy the generic integrity of the text in question, thus resulting in somewhat (sic) confusing text-task relationship in ESP.

Thus, it is the very structure and other conventionalized features of the text play important roles in relaying the message to other members of the discourse community. This means that the students, in addition to coping with English as a foreign language, must also learn about these genre features.

If "simplification" is not an option, what can be done? Bhatia (1993, p. 146) suggests "easification" by which various devices are used to "guide the reader through the text without making any drastic changes to the content or linguistic form of the text, thus maintaining its generic integrity." For example, with legislative documents, he suggests clarifying the cognitive structuring by highlighting complex syntactic structures, reducing the information load by breaking down lengthy statements into several subsections, and using illustrations to make interpretations easier to grasp (p. 209- 215).

Reading Portfolio and PAIL

Here I would like to suggest two ways to easify ESP texts in order to make them more accessible to the EFL student: the use of a "reading portfolio" and PAIL. The idea of writing portfolios is often used in composition classes and the use of "disciplinary portfolios" has recently been suggested by Hirvela (1997) for the teaching of EAP (English for academic purposes) writing to nonnative speakers at the graduate school level. The students work on the various types of texts needed for their discourse community–journal article, writing interview. For undergraduate students, a "reading portfolio" of texts that the students are likely to encounter in their major fields would prepare them for future study and work. Items for such a portfolio would be collected based on consultation with professionals in the field.

The other teaching aid is PAIL. Before starting on a new text, the students are asked to do a bit of genre sleuthing. They are asked to find the PAIL for the text:

P = purpose	Why was this text written?
A = audience	Who was it written for?
I = information	What kind of information does it contain?
L = language	What are its language features?

This kind of exercise makes them aware that different texts have different purposes and therefore require different approaches–no one reads the TV guide like a novel, from start to finish; different texts require different reading strategies.

Note the serendipitous acronym PAIL also represents the concept of a text as a "container" for conveying ideas to others. In a discourse community, the members have specific notions of the genre to which a text belongs (Swales, 1990: p. 55), thus making it essential for students to be able to recognize these characteristics in order to retrieve information from a text and also be able to package and present their ideas in a suitable format so that others of their discourse community will recognize it as a genre item. Berkenkotter et al. (1991) chronicles the "initiation of a graduate student into a writing research community." As for work with undergraduate students, Bloor (1996) describes how students in the department of computer science were initiated into "three distinct genres (or emerging genres) of student writing." She gives specific examples from student messages posted on-line in news groups.

Examples from a Course in English for the Pharmaceutical Sciences[3]

Text type	Content	Source	Easification
Student textbook material	Introduction to early work in immunology	*Basic and Clinical Immunology*	*Highlight dates then complete table to represent chronology of early work
Experimental procedure instructions	Method of identifying synthetic organic color additives in food	*Official Methods of Analysis of the Association of Official Analytical Chemists*	*Complete flow chart of procedure *Represent procedure as illustrations
Student textbook material	Description of the anatomy of the human eye	*Eugene Wolff's Anatomy of the Eye and Orbit*	*Find definitions of different parts of the eye from the text and sentences of own
Phenomenon explanation	Comparison of two types of chromatography	*USP (United States Pharmacopocia*	*Complete table of comparison *Complete cloze quiz to demonstrate understanding phenomenon
Drug information	Description of a drug and its uses	*Physician's Desk Reference*	*Consider case studies of patients who may use the drug
Abstract of journal paper	Summary of essential information in paper	*Chemical Abstracts*	*Complete cloze lists of essential information

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[3] Texts presented to second-year students in a four-year university course in pharmaceutical sciences.

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Students in this second-year course have completed a first-year course in which they have been introduced to the concepts of reading portfolios of different types of texts and the use of PAIL. They have about 13 sessions of 90 minutes in each of two semesters. There are about 50 to 60 students per class and to encourage active participation, they are asked to form groups of about four students each at the start of the year. This is to take advantage of the group -action dynamics which seems to work very well with Japanese students. (Student questionnaires in these classes have indicated a very positive response to the use of group work.) The students work together in groups to discuss texts, answer questions, and present reports.

Easification of a text from the *Physician's Desk Reference*

As a specific example, let us see how we can easify a text written for a physician to refer to when prescribing a drug. Simply trying to read through such a text would be difficult even for a native speaker of English who is not in the medical/pharmaceutical field. It has numerous technical terms for diseases and symptoms. The following is how the students are encouraged to approach the text.

First, the students are asked to identify PAIL for this text. One possible set of answers is as follows:

Purpose	To offer a physician the information necessary to safely prescribe a drug
Audience	Physicians and pharmacists (the latter must sometimes check prescriptions written by physicians)
Information	Description of drug, inactive ingredients, clinical pharmacology, indications and usage, contraindications, warnings, precautions, adverse reactions, what to do in case of overdosage, dosage and administration, form of supply, and caution about dispensing by prescription only [All of this can be easily obtained from the headings of the various sections.]
Language features	Headings, chemical compound names, technical terms (medical terms for diseases and symptoms), lists (mainly of diseases and symptoms), some complete sentences, chemical formula diagrams, drug name and headings using all capital letters, bold type

The language features section will vary greatly for different texts. For example, for the United States Pharmacopoeia text listed above, L would be

Language features	Four paragraphs Complete sentences A few numbers

This PAIL exercise makes students more aware of the differences in the physical format and features of different texts. The aim is to make them become aware of these features when encountering a new text. Thinking about such text features is often a revelation to Japanese EFL students who have been exposed almost exclusively to English in junior high and high school textbooks which present mainly conversation dialogues and isolated sentences which they are expected to "read" word for word, often relying on literal translation for understanding (Noguchi et al., 1994).

For the *Physician's Desk Reference* text, the students are told not to attempt a translation but to identify sections to examine if confronted with a patient needing a drug like this one. They are given eight true/false statements and told to identify the section in which they expect to find the answer. For example, "This drug cannot be given to pregnant women." would require checking the "Precautions" section under the subheading "Pregnancy." After they have become aware of how to "read/use" this text, they are asked to do a second exercise in which they must decide whether or not the patient described can be prescribed the drug. They must identify the features which are important for the final decision (e.g., whether or not a patient suffering from hypertension or cardiovascular disease can be given the drug) and then explain their decision. The exercise is planned so that the answer can be either "yes" or "no." The students are told that even more important than the simple yes/no answer is the information which must be given to the patient if the drug is prescribed (e.g., the patient must be cautioned against driving a vehicle or operating machinery after taking a drug with sedative effects) and, in case of a negative decision, the explanation of why it was made and what alternative there might be to help the patient. Finally, they are asked to work in their groups and think of their own patient cases, which are then presented to the class. The other students consult each other in their groups to come a decision about whether or not the drug can be prescribed for each case. These exercises should help make the students aware of the purpose of the text and how to extract necessary information from it.

The question remains of how to deal with the difficult medical terminology. As the students will need to be familiar with the many Greek and Latin affixes that are used to compose terms describing diseases and symptoms (many are used on patient records), they are given lists of such affixes to learn before every class and take 10- minute quizzes at the beginning of each class period. Each quiz is composed of ten statements (fifteen in the second semester) using an affix-containing term. For example:

> An oncogene can cause a normal cell to become cancerous. The electrocardiogram revealed that the young man had a heart problem. Japanese encephalitis, in which the brain becomes inflamed, is transmitted by a mosquito.

The underlined words are given as choices to fill in the blanks. As can be seen, the students become exposed to both the technical terms as well as sub-technical vocabulary used in medical fields. Immediately after the quiz, the students exchange papers and are invited to provide the completed sentences after group discussion (there is extremely active participation with groups vying to provide the answers because points are given for all contributions regardless of whether or not they are correct). They are also asked to explain the reasons for their choices, that is, what hints were in the sentence to support each choice. This transforms the quiz into a learning exercise which incorporates listening as well as pronunciation practice.

Summary

As discussed above, different texts require different ways of retrieving and packaging information. This is because discourse communities of professionals have developed their own genres for facilitating communication among themselves. Students aiming to join these communities must be initiated into these genre practices. For ESP courses, I suggest that the students be exposed to a genre portfolio of text types and learn to think about the PAIL for each type. To help make these texts more accessible to the students, various kinds of exercises should be planned to guide the students toward discovering the optimal approaches to different types of texts. These genre tools should equip EFL students with the means to more efficiently approach English texts in their fields of specialty.

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From Non-communicative Exercises to Technical Writing: Profile of a Two-Semester Preparatory Sequence

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Abstract

Activities and procedures used for helping students to transition from scant and non-communicative writing to successful communication across several writing genres (in preparation for the next step of field-specific technical writing) are described. Suggested activities include directed journaling, student self-correction based on teacher feedback, repeated re-writes leading to portfolios, and context-embedded grammar practice activities. Student examples and feedback are shared, followed by a discussion of concerns and possible future adaptation.

Introduction

Upon entering universities in Japan, many students can not communicate ideas in writing. For example, under 40% of students entering our classes at the University of Aizu demonstrated (on a pre-test) even minimal ability to write paragraphs, yet a program goal is to prepare them for a technical writing course upon completion of two semesters (or a total of around thirty 90-minute classes) of general composition classes.

In this paper, I will attempt to sketch as clear a picture as possible of the activities and methods used in my Composition 1 and Composition 2 classes at the University of Aizu, a Japanese prefectural computer science and computer engineering university that also maintains significant requirements for English language skills.

Activities designed to enable students to accomplish the transition described (in the first paragraph) above include the following: weekly free-writing journals, weekly hard-copy re-writes, use of a numerically-coded list of suggestions for improvement, in-class context-embedded exercises, in-class small-group review and critique, in-class review of new list additions and and in-class review of points related to repeated student writing errors.

Grades in the mixed-level classes are based largely on ongoing completion of tasks. Tests are graded primarily to guarantee student motivation in order to to maintain the role of testing as an accurate gauge of student performance and improvement for teacher and student reference.

Finally, students are asked to complete anonymous questionnaires in which they report their general performance and improvement and their estimation of the value of some of the tasks used in class.

Background – the Setting at the University of Aizu

The University of Aizu is located in Aizuwakamatsu City, Fukushima Prefecture (in rural Tohoku, Japan). There are currently only two majors in the undergraduate division of the university, computer software and computer hardware. The school was founded 4 1/2 years ago with a vision to bring international computer expertise and access to the people and industries of the Aizu area, Fukushima Prefecture, and Japan. Roughly 50% of the faculty are non-Japanese, and classes are taught in either English or Japanese (as faculty members are required to be fluent in at least ONE of those 2 languages). In addition, a written graduation thesis in English is required of all seniors prior to graduation.

All students are required to take a core language cluster of 10 English classes. They can also choose English electives and/or English SCCP's (Student Co-operative Class Projects) if they so desire. The English core consists of the following courses: 1 term of Pronunciation (1st semester), 3 terms of Listening/Conversation (1st, 2nd, and 4th semesters), 2 terms of Reading (2nd and 3rd semesters), 2 terms of Composition (1st and 2nd semesters), and 2 terms of Technical Writing (3rd and 8th semesters). Each class meets 90 minutes per week for approximately 15 weeks per term.

Key Activities and Rationale

The key activities of my course (and their weights in calculating the grade) include pre- and post-tests (the post-test is 15% of semester grade), weekly writing journals (20%), repeated weekly re-write assignments (20%), and a final portfolio of a student's best essays (30%). The remaining 15% of the grade is based on a final grammar exam required by our composition teaching group as a whole.

- *Pre- and Post-test Essays*

Students are required to write an essay the first day of class on a general topic about which they all have knowledge (i.e. "My High School Days"); this is not graded, but it often becomes the basis of their first "re-write essay", described below. Likewise, one of the (graded) final exams for each course is an in-class essay in which students can choose from 3 general topics relating to genres we have covered in class. The final exams serve as post-tests for each class (and the post-test for Composition 1 serves as the pre-test for Composition 2). Unlike most of the activities described below, the above information is true for all of the composition classes taught at this university, not only for the classes discussed in this paper. When returning post tests to students, I attach a copy of the (ungraded) pre-test along with each student's corrected and graded post-test. In this way, a student can see how different his/her (first-draft) writing looks at the end of the semester.

- *Writing journals*

Students are required to buy a notebook (B5 size or larger) in which they will write weekly journal assignments. Twenty percent of each student's grade is based on completion of these weekly writing journals – 2 B5 pages (or one page front and back) double-spaced checked every week in class. The grade is based solely on the length of writing (2 complete pages or more = 20 points, 1 1/2 pages = 15 points, etc.); grammar, spelling, and other correction criteria were not considered at all in determining scores for writing journal assignments.

Journals are handed in every week at the beginning of class, checked quickly for length (and appropriateness of task, if any guidelines were assigned) while students are engaged in assigned activities, and returned to students before the end of class. Checking needs to be done quickly, and scores are simply marked onto a class list – to be transferred to a spread-sheet later.

Optional general topics are assigned at first, with the option of writing about anything else instead. However, as the first semester progresses (and throughout most of the second semester), general writing styles/genres (i.e. opinion essay, giving instructions, etc.) are required. If a student's journal entry using the required style does not fill 2 pages, the remainder can be filled with anything the student chooses to write about.

The purpose for requiring writing journals and grading them on length alone (and perhaps genre but NOT grammatical or organizational accuracy) is to train students to focus on expressing their ideas naturally on paper. Most of their past experience (before entering university) was based on word-by-word translation and/or sentence-level non-communicative exercises, with a focus on grammar apart from meaning. Writing journals are used to actively require and challenge students to focus on writing complete thoughts, ideas, and concepts; this is in contrast to a previous strategy (among many students) of focusing only upon word-level and sentence-level accuracy without concern for communicating concepts. The length (2 B5 pages double-spaced) was chosen because it is considered by the instructor to be a challenging but attainable goal for most students.

Although some instructors no doubt prefer more infrequent monitoring of writing journals, there are many benefits to weekly in-class grading. It better encourages the ongoing writing practice necessary for long-term retention (rather than a sudden spurt of writing activity prior to a single deadline), gives negligent students immediate incentive to improve their effort the next week, encourages class attendance, cuts down on the instructor's out-of class grading time, and provides material for students to use in future (re-write) essays. It is my personal preference to enter the data on a student list and transfer it to a spread-sheet later because of the time and effort needed for either re-organizing all the journals into spread-sheet order or scrolling the spread-sheet repeatedly each time the next journal is out of sequence. Since the class list is in the same order as my spread-sheet, transfer is simple and quick.

I have chosen to assign general topical categories and/or writing genres of journal entries for several reasons. First, some students have significant difficulty thinking of their own topics. Second, having potential topics and genres in mind aids in the development of examples, exercises, and/or introductory activities for each week's assignment.

A third important reason for assigning general categories and/or genres for journal entries is that a potential drawback of the re-write and portfolio approach that I have adopted/adapted is that it can tend to result in students applying only the written genres they are currently accustomed to, such as narratives of experience or simple sensory descriptions, and repeatedly using such low-level writing styles for all their essays (Jarrel, 1997). Frequently setting weekly guidelines upon genre in writing journals helps push students to develop their writing beyond the styles they are most comfortable with – especially since my students will probably need to make use of specialized genres in their technical writing and content classes, graduation theses, and future careers. Of course, these weekly guidelines need to be communicated clearly in a form that is easily retrievable for verification; e-mail is well-suited to such communication, and my students are well-acquainted with e-mail from frequent use at the university.

Finally, controlling writing journal genre and guidelines allows the teacher to gradually challenge more advanced students to deeper evaluation and explanation when responding to written texts assigned for students' response; this can help to overcome a tendency for students to simply react to a text (with or without understanding) rather than understanding, evaluating and critically responding to texts. Such understanding, evaluation and critical response is usually expected in content classes but is often missing from EAP (English for Academic Purposes – for non-native speakers) courses (Leki & Carson, 1997).

- *Weekly Rewrite Assignments*

Another 20 percent of students' grades are base on their rewrite assignments. I accept a maximum of 1 essay per week, handed in to me by Saturday morning, and I return them to my classes the following Thursday in class. These are essays that are written and rewritten (using word-processor software or e-mail) until they are considered complete (coherent, clear, well-organized and grammatically correct) by the instructor. There is a progression of focus – particularly early in the first semester, when long-term practices are being broken and targeted areas of writing skill are being practiced for the first time.

It has consistently been my experience that Japanese students (perhaps to a larger degree than students of other socio-cultural backgrounds) tend to under-explain their ideas, placing the responsibility upon the reader to guess their intended meaning and/or to share highly comparable personal background understanding. Furthermore, computer science, which is the presumed career of many of my students, may require a unique level of ability to prepare articles and presentations for us ignorant readers from other disciplines who read and refer to computer science research (Anthony, 1997). Therefore, focus on complete explanation, elaboration, and support of ideas is of particular importance from the start. Organizational factors, such as length, paragraph division, introductions, conclusions, and titles are also marked before moving on to other things.

Another early (and often ongoing) focus is to help a student recognize any strange information that seems totally unrelated to the main topic of his/her essay and/or to the paragraph in which it appears; the student can then consider whether to perhaps remove the information or to expand it so that the connection with the other ideas of the essay becomes clearer; I have found this to be another persistent tendency of Japanese students, which is probably based largely on differences in rhetorical style and minimal training even in Japanese writing. However, it has proven to diminish consistently with time, reminders, and practice – in first drafts, not only in re-writes.

As the semester continues, students work on practices exercises and receive feedback related to other problem areas as well, such as spacing before and after punctuation, capitalization, ungrammatical sentence patterns, and use of spell-checking software to help with some obvious mistakes. As students are taught and required to apply each of the above skills, they lose points when they don't apply them. They also lose points any time they make no effort to apply the instructor's suggestions and corrections; if suggestions and corrections are followed unsuccessfully or applied differently than intended, no points are lost.

I use a numerically coded system of abbreviations that students can refer to on a web-page. Numerical coding is my preference because I can easily update, remove, or expand my list of codes according to the errors of my students, and I'm less tempted to write out the correct answer for them. I re-organize my codes every semester, and they are hopefully becoming clearer and more complete. Examples of current suggestion codes for student reference and instructor reference, which are constantly being adapted and updated, are included as appendices at the end of this paper.

Another benefit of numerical coding is that I tend to quickly memorize the short codes, since I use them repeatedly for many papers, but students don't memorize them as quickly (since no one student uses them anywhere near as much as I do). The result is that I can write a simple two- or three-digit code from memory when I come across a repeated problem. I can also compress the several (currently 3 or more so far this semester) pages of text that the student sheet takes up into a one-page abbreviated form for myself. When students look at the circled portions of text and accompanying numerical codes, they can look at the explanation of the kind of mistakes they made and try to correct them, or they can choose to try to catch and correct their own mistakes before looking at the form to check whether they have correctly diagnosed them.

Using coded suggestions also allows students to receive feedback directly from me on what they need to improve, yet other students can actually help them make those improvements during group work time in class. In group work times, each person gets support one at a time from a small group concentrating on improving his/her paper based on my suggestions and/or group members ideas. In this way, students' preference for direct input from the teacher (Zhang, 1995) is honored, but they also learn to rely on and help each other.

The entire (current) texts of the student version and my short personal reference version of the web-page correction guide (without HTML links or font characteristics clearly indicated) are included as appendices. You can (presently) access all of my (updated) composition/writing course links (except the teacher's version of the correction guide) through a link from my home page, which is located at the following URL.

http://www.u-aizu.ac.jp/~doug/welcome.html

- *Final Portfolios*

At the end of the semester, portfolios of students' best essays are turned in. Once re-writes have been labeled, "Ready for Portfolio", according to one of the numerical codes, they can get complete credit as ONE of the essays in the final portfolio. The final portfolio is worth 30 percent of the semester grade, and it is based on the number of completed essays (or the total length). Placing a significantly larger weight on portfolios of students' best work than on a holistically-graded exam is consistent with research findings about the accuracy of the two methods of grading ESL/EFL students' actual writing ability (Ruetten, 1994), since they consistently spend more time writing and/or revising papers for content courses than do native speakers.

For Composition 1, a full-credit final portfolio (collected after approximately 13 weeks of classes) consists EITHER of 3 completed essays OR of 1 or 2 completed totaling 450 words or more. This assumes an average essay length of around 150 words but allows for shorter essays; it also allows credit to those whose have spent a lot of time on long involved essays rather than 3 short essays.

For Composition 2, a full-credit final portfolio (collected after approximately 12 weeks of classes) consists EITHER of 4 completed essays OR of 2 or 3 completed essays with a total of 800 words or more. This assumes an average essay length of around 200 words or more but again allows for shorter essays and gives greater credit to longer more detailed essays.

An added limitation has been added this semester that a maximum of 1 narrative essay (or a maximum of 400 words) will be accepted for credit. This is meant to discourage the use of simpler genres by students who might tend to to avoid more challenging genres that serve as building blocks for their future writing development, In the future, the maximum credit of words for narrative essays will probably be reduced to 200 rather than 400, but the guideline was introduced during the semester when some students had already written fairly long narratives.

Students lose points for every incomplete (not yet labeled, " 100 – Ready for Portfolio") essay in their final portfolios, and they lose additional points for significant errors and/or problems in their not-ready-for-portfolio essays.

Students' Reported Evaluation and Comments

At the end of the course, students are given a questionnaire consisting of 21 questions assessing (on a Likert-type scale) their perceived improvement in ability and motivation and the perceived benefits of special activities used in the classes. The 21st question is an open-ended request for further comments or suggestions. A copy of the questionnaire is printed as an appendix to this paper.

Students' impressions of the benefits of the Composition 1 class this year were consistently positive (Composition 2 is still in progress), with very few exceptions on most of the items. This is significant in that a relatively large amount of work was required of students, and this is contrary to the normal stereotype of the Japanese university system and the stereotype of the apathetic and easily discouraged Japanese student of English. A general report of students' responses about the benefits of activities is given below.

Writing Journals – 78% of students reported that writing journal assignments had a positive result for them (34% said they received a "large good result", and 44 percent reported a "small good result"). 10% reported "no change," and 3% said they had been " bad for [their] motivation/skills."

Rewrites of Compositions – 87% said re-write assignments had a positive result (48% large good result, 39% small good result). 6% reported no change, and 1 student said they had affected him/her negatively.

Final Portfolio – 71% described the experience of turning in a portfolio for evaluation as positively affecting their skills and/or motivation (34% large good result, 37% small good result). 15% reported no change, and 10% reported a negative influence.

I view these results very positively. The higher degree of positive response to re-writes (and accompanying teacher feedback) as compared with writing journals is consistent with expectations that students would value activities involving teacher feedback more highly than those not involving such feedback (Saito, 1994). I was surprised by the positive response to portfolios, which were used primarily for evaluation and grading, and which were not ongoing activities providing practice for students. It would have perhaps been useful to include similar questions about students impressions of the benefits of department-wide evaluation instruments: an in-class timed writing exam and a multiple choice discrete-point grammar exam. However, the purpose was to measure student response to activities and methods that could have been new and challenging or perhaps difficult and discouraging for them.

Possible Concerns, Responses, and Future Adaptations

- *Validity of Pre- and Post-tests*

Using the pre-test (at least in the first term) as a comparison with the post test at the end of the term is probably not a fully accurate measure of student improvement, since the setting and atmosphere of the tests are different. For example, the pre-test is not graded, whereas the post-test is graded. In addition, students are dealing with a new format and new software on the pre-test, whereas they are already familiar with such procedures and software when they take the post-test. Finally, the genres offered to students for the pre-tests (in both courses) are not necessarily comparable to the genres offered in the post-tests. As a result, perhaps the difference between performance on the 2 tests is somewhat inflated during the first term; however, the test of the second term is probably a more accurate gauge of improvement from the end of the first term until the end of the second term.

- *Time Considerations*

One of the main concerns for any composition teacher is likely to be the self-inflicted pressure to spend a potentially unlimited amount of out-of-class time every week reading and responding to students' compositions. Our classes have a maximum of 32 students per class. So far, I have not had more than 3 composition classes in one semester, although I also teach listening/speaking classes, so I have always had less than 100 re-write essays to correct per week. However, the numbers have still often been overwhelming. Instructors always need creative ways to limit processing time for student essays.

One method I tried for limiting time was setting a timer for 5 minutes each time I began a new essay and trying to stop when the timer went off; however, this didn't work very well for me, although it may for others, because I was frequently interrupted and would then have to start my timer again and/or have my alarm going off in the middle of important discussions for no apparent reason. In addition, some of my more proficient and/or long-winded students write long and involved essays, and it may take me almost 5 minutes to read through and process one of their essays once (which I TRY to do BEFORE beginning to mark the paper); it would be unfair not to offer any suggestions or help simply because time had expired, especially since their errors and difficulties often needed more elaborate explanations and/or the addition of a new numerical category.

This semester I have added a numerical code (71) that means, "I have already marked at least 10-15 suggestions, and I need to go on to the next essay." In addition, students who receive several #51 marks – indicating they aren't trying to apply my suggestions – lose points for wasting my time; once I find 3 or 4 such problems on the same draft, I stop grading their papers. Finally, if people aren't yet applying some of the previously covered principles (introduction, conclusion, using paragraphs, spaces after punctuation, etc.), I also stop without making other suggestions.

Establishing general sets of useful activities that students know how to do also helps cut down on preparation time. As a bank of practice activities is developed and/or accumulated by a teacher, class preparation can occupy a smaller amount of time. It is my attitude that the benefit my students receive from my individual feedback takes precedence over other preparation.

- Program and Schedule Considerations

Program design also affects quantity and style of activities. For example, weekly 90-minute lessons are probably not ideal, but at the same time the focus on the classroom for a contact point between out-of-class activities can also help develop learner autonomy, and adaptations can be and are made.

In addition, the schedule of Composition 1 first semester – prior to Reading 1 and without any other previous university-level English course shared by all our students – was perhaps misguided. However, a newly proposed curriculum is expected to be implemented beginning in April 1998 that should greatly improve the situation.

Another difficulty (or benefit, depending on perspective) is the practice of grouping students into classes according to academic major and alphabetical order rather than according to ability. This provides a challenge, but one of the strengths of this approach is that it allows flexibility for each student to begin where s/he is and improve based on ongoing feedback (from the instructor and peers) and immediate personal application of what is being learned – regardless of entrance level or past opportunity. It provides the added benefit of avoiding the effective, although inadvertent, tendency of permanently tracking lower students into low-level classes; the level of material covered in lower-level classes virtually always finishes at a lower level than the concurrent higher-level classes, thus consistently shutting lower-level students out from subsequent semesters of higher-level classes.

- Other Considerations

As alluded to earlier, a possible drawback to a free-writing, re-write, and portfolio approach is that students who choose their own genres may tend to gravitate toward the simplest genres and writing styles, thus never progressing to more complicated genres and compositions that would better prepare them for the writing expected in content courses and/or their future jobs. However, these concerns are not restricted to such types of ESL classes; rather they are an inherent danger in any environment where students are not consistently challenged and required to move beyond their current skills and comfort zones. EAP classes have to either streamline training (if and when realistically possible) or else slow down the process of student entrance into content classes. This instructor considers it an ongoing necessity to continually adapt materials and practices as new insights become available – through experience, reading, research, and feedback (from students and others).

Finally, there is a natural tendency among most of us to conduct feedback primarily along the lines of grammar and mechanical correction rather than teacher-student dialogue with a focus toward helping students to express meaning (Susser, 1994). Using a numerical system, or any other time-saving repetitive standard form for marking, can easily facilitate inadvertent shifting back into a mode of simply circling " mistakes" for correction. However, writing out suggestions and clarifying questions can greatly increase time expenditure, which tends to result in the same effect over time. In the end, the issue of time tends to push most of us toward less interactive methods. The effort to focus on working with students to help them improve in their ability to communicate meaning requires an ongoing effort; this effort should be present in our methodological decisions and our pursuit of more productive solutions.

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Appendix A

Suggestion Codes for Students

The following numbers will be used to show you what kinds of errors you make in your essays. When something is marked, you may want to try to guess what kind of error you made and fix it before reading my explanations below; then you can use the explanations to check whether you guessed correctly. This may help you improve in your ability to find and correct your own errors in the future.

AN IMPORTANT POINT TO REMEMBER

The most important idea in writing is to communicate your message clearly in English. You are writing in English, so you can assume that the main readers (audience) are NOT Japanese -- since you would probably write to Japanese people in the Japanese language. For this reason, try to use an appropriate communication style, and communicate as accurately and clearly as possible.

Select a shorter version to print out and check your mistakes.

1. **Title**: You will lose points if you have no title.
> A. The title should be interesting, clear and concise.
> B. The title should be closely related to the main idea of your essay.
> C. The title is usually NOT a full sentence.
> D. For composition essays, capitalize the first and last words of the title. Also capitalize all important words. *There are DIFFERENT rules for journal article titles.*
2. **Introduction**: You need a short introductory paragraph at the beginning of your essay. You will lose points if you don't have an introduction. **For more information about writing an introduction, click HERE.**
> A. The introduction should **sound interesting**, so the reader will want to read your essay. **Avoid** phrases like, "I'm going to write about...."
> B. The introduction should **introduce** the main topic of your essay, so the reader understands what you are going to write about. For more information, click here.
3. **Conclusion**: You need a short concluding paragraph at the end of your essay. You will lose points if you have no conclusion. **For more information about writing a conclusion, click HERE.**
> A. The conclusion should quickly **review the ideas** that you wrote about in your essay and/or make some kind of **important final statement** about the main topic of the essay.
> B. The conclusion should leave an impression in the reader's mind. This is the **last thing** s/he is going to read, and you want him/her to **remember** it.
4. **Paragraphs**: Your essay should be separated into paragraphs (or you will lose many points).
> A. **Skip lines between paragraphs (or you will lose points).**
> B. Each paragraph should have **one main idea**.
> C. There are usually a few sentences supporting, explaining and/or clarifying the main idea of the paragraph.
> D. If this message is written, please **begin a new paragraph** at this point.
> E. **Continue your paragraph on the same line.** Don't begin a new line except when you have reached the end of the previous line or when you are starting a new paragraph.
> F. This sentence is NOT related to the rest of the paragraph. Delete it, or use it in a different paragraph.
> G. Add more details. This paragraph is incomplete.
> H. The order of your sentences within this paragraph is strange. Please improve the order of the

Appendix B

Instructor's Reference Suggestion Guide

1. **Title**: lose points if you have no title.> A. interesting and short. > B. closely related to the main idea > C. NOT a full sentence. > D. capitalize first, last and important words.

2. **Introduction**: You will lose points if you don't have an introduction.> A. **sound interesting**. Avoid phrases like, "I'm going to write about...." > B. **introduce** the main topic

3. **Conclusion**: lose points if no conclusion. > A. **review the ideas, important final statement.** > B. **final impression**

4. **Paragraphs** : separated into paragraphs. (-many pts.) > A. **Skip lines (- pts.)** > B. **one main idea.** > C. sentences supporting > D. **new paragraph** > E. **the same line.** > F. sentence NOT related to paragraph. > G. more details--incomplete. > H. strange sentence order > I. paragraph NOT related to introduction/essay > J. Need transition and/or another paragraph

5. Unclear meaning/ strange wording: > A. Wrong word order > B.not necessary -> delete. > C. not real English > D. add word/phrase. > E. not clear for most native speakers ->explain> F. wrong word/phrase > G. need more information: details. Support/illustrate more completely. > H. I don't understand --> see me. > J. Unnecessary/Unrelated details --> Delete? > K. Too informal?

6. Spacing mistake: (lose points) > A. added spaces in wrong place. > B. need space

7. Don't begin a sentence with this word.

8. Spelling : > A. confused "r" and "l". > B. same sound > C. similar but different words. > D. katakana English > E. didn't use spell-checker [lose points].

9. Capitalization: > A. need capital. > B. remove capital. > C. First word of sentence (- pts.)

10. General Punctuation : > A. wrong punctuation. > B. should be NO punctuation. > C. Need punctuation. > D. wrong order. > E. Diff. levels --> diff. punct. --> see me?

11. Wrong verb tense > A. not an English vb. form

12. Subject , Verb , etc. mismatch: > A. Noun-Verb mismatch > B. Subject-Object mistake > C. Other singular-plural mismatch

13. Pronoun > A. no noun nearby > B. 2 or more nearby nouns > C. need pronoun (or another noun) > D. wrong pronoun> E. add a pronoun/noun. > F. Do NOT repeat noun/pron. (~wa/~ga?) > G. Avoid gender pronouns and adjectives. > H. s/he, etc. (pron.) > J. his/her (adj.

14. Wrong grammatical form:> A. noun/pronoun > B. verb > C. adjective > D. adverb > E. preposition > F. not a complete sentence. > G. sentence too long, etc. -->break it up. > H.combine sentences.

15. Use parallel grammar forms (parallelism).

16. Wrong word form or ending: > A. singular/plural > B. can NOT be plural > C. "each" and "every" > D. ~ing vs. ~ed

17. Article: > A. wrong article > B.need article> C. NOT need --> delete

18. Font/marking: > *A. Italics* > B. Indent Text > C. Underline or *Italicize Book Titles* > D. *"Article Titles" - Italics* or "Quotes"

19. Transition words/phrases > A. Vary sequence words. > B. Vary transitions w/ similar meaning.

20. Special Punctuation: > A. Hyphen > B. Parentheses > C. Comma(s) > D. Dash(es) > E. Quotation Marks > F. Colon > G. Semicolon > H. Apostrophe (ownership/missing letters)

40. Plagiarism: > A. short --> give credit (or lose points)> B. Long/entire --> NO! (zero credit)

41. from a previous semester/ different class? --> no credit.

51. I previously made suggestion (lose points)

61. Give me ALL PREVIOUS DRAFTS .

71. marked more than 10 items already

81. Only 1 narrative (maximum 1 essay/400 wds. credit)

91. Come to see me --> Need to talk to clarify.

100. Ready for portfolio and web page.

Appendix C

Student Questionnaire

Final Questionnaire - English Composition 1 July 1997

Please circle the correct major: Computer Hardware / Computer Software

Part 1. Circle the answer you feel best describes your thinking about each topic.

1. Have you improved in your ability to write your thoughts and ideas quickly?
A. My skills are worse now than before.
B. No change
C. Small improvement
D. Large improvement
E. I don't know.
F. I don't understand.

2. Have you increased in your desire/willingness to write your thoughts and ideas?
A. My desire has decreased.
B. No change
C. Small increase
D. Large increase
E. I don't know.
F. I don't understand.

3. What has been the result of writing journal assignments for you?
A. They have been bad for my English motivation/skills.
B. No change
C. Small good result
D. Large good result
E. I don't know
F. I don't understand.

4. How many writing journal assignments did you complete?
A. None
B. Less than half
B. More than half
C. (almost) All of them
E. I don't know.
F. I don't understand.

5. Have you improved in your ability express your thoughts and ideas in an essay?
A. My skills are worse now than before.
B. No change
C. Small improvement
D. Large improvement
E. I don't know
F. I don't understand.

6. Have you improved in your desire/willingness to express your thoughts and ideas in an essay?
A. My desire has decreased.
B. No change
C. Small increase
D. Large increase
E. I don't know
F. I don't understand.

7. Have you improved in your ability to find and correct mistakes in your essays?
A. My skills are worse now than before.
B. No change
C. Small improvement
D. Large improvement
E. I don't know
F. I don't understand

8. Have you improved in your ability to write good introductions for your essays?
A. My skills are worse now than before.
B. No change
C. Small improvement
D. Large improvement
E. I don't know
F. I don't understand

9. Have you improved in your ability to write good conclusions for your essays?
A. My skills are worse now than before
B. No change
C. Small improvement
D. Large improvement
E. I don't know.
F. I don't understand.

10. Have you improved in your ability to write good paragraphs in your essays?
A. My skills are worse now than before.
B. No change
C. Small improvement
D. Large improvement
E. I don't know.
F. I don't understand.

11. Have you improved in your ability to use punctuation and spacing in your essays?
A. My skills are worse now than before.
B. No change
C. Small improvement
D. Large improvement
E. I don't know.
F. I don't understand.

12. Have you improved in your ability to clearly communicate your ideas in writing?
A. My skills are worse now than before.
B. No change
C. Small improvement
D. Large improvement
E. I don't know.
F. I don't understand.

13. Have you improved in your ability to use correct grammar in your writing?
A. My skills are worse now than before.
B. No change
C. Small improvement
D. Large improvement
E. I don't know.
F. I don't understand.

14. What has been the result of re-write assignments for you?
A. They have been bad for my English motivation/skills.
B. No change
C. Small good result
D. Large good result
E. I don't know.
F. I don't understand.

15. How many re-write assignments did you complete?
A. None
B. Less than half
C. More than half
D. (almost) All of them
E. I don't know.
F. I don't understand.

16. What has been the result of the final portfolio for you?
A. They have been bad for my English motivation/skills.
B. No change
C. Small good result
D. Large good result
E. I don't know.
F. I don't understand.

17. How many of your essays were completely ready for your final portfolio?
A. None/ Less than 150 words
B. One/ More than 150 words
C. Two/ More than 300 words
D. All 3/ 450 words or more
E. I don't know
F. I don't understand

18. Have you improved in your ability to help others improve their writing?
A. My skills are worse now than before.
B. No change
C. Small improvement
D. Large improvement
E. I don't know.
F. I don't understand.

19. Have you increased in your desire/willingness to write in English without using a dictionary until after you're finished?
A. My desire has decreased.
B. No change
C. Small increase
D. Large increase
E. I don't know.
F. I don't understand.

20. What has been the general result of composition 1 class for you?
A. It has been bad for my English motivation/skills.
B. No change
C. Small good result
D. Large good result
E. I don't know.
F. I don't understand.

21. Please write any other ideas (comments or suggestion) you would like to make about your composition class. (You can give this paper to me today or bring it to my office.)

BEST COPY AVAILABLE

E-Mail in the Business World: Issues for Teachers of ESP

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Introduction

The nature of written business communication is changing rapidly. The shift from paper to electronic text that began with the widespread adaptation of the fax in the 1980s continues today as communication shifts to e-mail and other forms of computer-mediated communication (CMC). Technology is changing so fast that keeping up with current practices is difficult for a teacher of Business English, and commercial material is of little help. The units on business letters in most texts have hardly changed in the last 20 years. Faxes and telexes are just now appearing, even as their importance declines.

The future will see e-mail take over as the medium of choice in those companies where it hasn't already done so. Usage is exploding. One business consultant reports that 15% of the American population uses e-mail today, and 50% will use it within five years (Fleundy, 1997). Hewlett-Packard's internal network carries 1.5 million messages a day (O'Brian, 1996). It's not hard to imagine a user of business English who never writes formal business letters. One who doesn't use English in e-mail at present probably will do so before long.

This article brings together information about current business CMC practices from the business press and research journals. The focus will be on information that can help a teacher teach realistic, up-to-date business e-mail usage.

Discourse Features of Computer-Mediated Communication

There are two main forms of CMC: synchronic and asynchronic. Both are largely text-based and require typing and reading on a screen. Synchronic CMC requires that users be simultaneously logged onto computers and involves "chatting" by typing messages that appear on the screens. Asynchronic CMC involves messages that are composed and sent, to be read later by the recipient. E-mail is asynchronic, and that form will be examined here, though certain discourse features are shared by both forms.

CMC has been the subject of numerous studies. A general consensus has formed that the discourse of CMC uses a register that uniquely combines aspects of spoken and written English (Murray nd, 1988; Danet, 1995; Liaw 1996; Hawisher, 1993; McElhearn, 1996). Danet lists slang, expressions such as "well," tolerance for misspelling, and the use of sentence fragments as oral features that are also typical of CMC.

Murray (nd, 1988) calls CMC a "simplified register," and compares it to other simplified registers. One of these is the language used to address someone perceived as incompetent in the language, such as a child or a foreigner. Another type of simplification comes from limitations in time and space, such as newspaper headlines and note-taking. She concludes that CMC is clearly a register that employs some of the simplification strategies of other simplified registers, but uses them in a particular way in response to the unique features of CMC.

Murray identifies five strategies as typical of CMC: abbreviations, symbolization, lexical simplification, syntactic simplification, and disregard of surface errors. These strategies are used for several reasons including the desire to save time, reduce keystrokes, and make the communication seem less formal. Since the goal is to communicate, errors are often left uncorrected unless they will cause confusion. Nevertheless, misunderstanding does occur, particularly when communication is between experienced and inexperienced users of CMC.

Far beyond simple misunderstanding is the phenomenon known as "flaming," identified as early as 1984 by Kiesler, Siegel and McGuire. Danet describes flaming as a "sudden flare-up of anger and insult," and offers several possible reasons for its occurrence in e-mail exchanges. One is the lack of important clues to the intention behind a message that would be supplied by intonation, facial expression and body language in face-to-face communication. Yet even without this paralinguistic channel, users of CMC tend to communicate conversationally and informally. The ease and speed of CMC may contribute to a message being sent with little consideration of its effect on the recipient. In some contexts the anonymity of the exchanges may serve to disinhibit users. Significantly, Murray (1988) found no instances of flaming in her study of CMC in a business context.

Technical Features of Computer-Mediated Communication

Certain unique features of e-mail spring directly from the technology used. Each message is accompanied by a header that gives the date, a subject, and the sender's name. In addition, most e-mail programs allow a user to insert a "signature file" at the end of each message. This file can simply be the sender's name, or can contain the sender's position and contact information, functioning as a digital business card. Signature files often include personal touches, such as quotes, proverbs and pictures.

Another unique characteristic of e-mail is the ability to quote from a message when replying. This feature has no counterpart in other forms of communication, and usage patterns are still evolving (Sherwood, 1995).

Business Norms

Some features are imposed on e-mail by the nature of the medium (for example, headers); other features have been identified as characteristic of the medium (for example, informal language, abbreviation). But, to be useful to teachers of Business English, we must look at business e-mail. Surely there will be additional features typical in a business context. Of the studies cited above, only Murray's work reports research on business CMC, and her data was gathered in 1984. There is real lack of research on current business CMC.

An alternative source of information on business communication norms is the business press. Articles from magazines such as *Forbes* and *Business Week* don't offer peer-reviewed research or academic-style linguistic analysis. The approach is prescriptive rather than descriptive. But it is useful to know what business people say they want in e-mail communication. In addition, since these articles are aimed at the general business reader, they can be copied and used in class.

Articles in the business press about e-mail universally express the writer's feelings of being overwhelmed with information. E-mail is a significant contributor to the flood of communication that business people cope with every day. Pleas for brevity and complaints about unnecessary messages abound.

Edwards (1993) blames a tendency to overuse e-mail on the ease with which a message can be written and sent. He claims that inter-office e-mail, for all its high-tech sheen, "is nothing more than that unglamorous standby, the memorandum." But unlike a paper memo, which gets thicker as it lengthens, e-mail simply scrolls away into invisibility as its written. There's no tangible indication of length. Edwards recommends a one-screen-per-message rule.

Rothschild (1994) expresses concern about the volume of messages rather than their length. He describes an executive who spends 3 hours of each 12 hour day handling about 150 e-mail messages. This executive claims that 80% of the messages are a total waste of time, and that e-mail has become devalued as a means of communication. Programs that can filter and prioritize incoming messages are available, but can only work crudely, for example, by deleting all messages from preselected senders.

Rothschild blames this communication flood on the seeming lack of cost for e-mail communication. There is no price mechanism to limit message production; the cost is born by the receiver of the message, in the form of the time spent to deal with it. Rothschild advocates the introduction of a charge to the sender of inter-office e-mail.

Seglin (1996) wrote about six e-mail problems and asked, "Wouldn't the world (at least my E-mail world) be a much better and, dare I say, more productive place if we could eradicate those six affronts to E-mail integrity?" Two of the problems are technical (problems with servers and airport telephones) but the other four are related to message content. This is a good article to give to students, and has the additional advantage of being available on the Internet. Here are his four pet peeves with some advice for students based on them.

"People who reply to multiple questions with a one-word response." In other words, be careful; ensure that your response is truly responsive. E-mail is so fast and that send button is so easy to click that it's tempting to just type it, send it, and forget it. It's a good idea to spend the extra few minutes to re-read it.

"E-mail responses that reiterate your entire message." The ability to quote messages in responses is great, but mustn't be used thoughtlessly. Quote the relevant passages only. (See Sherwood, 1995)

"Geographical notations. I don't care where you're E-mailing me from." E-mail is less formal than other forms of written communication, but don't go too far. Keep personal and chatty content to a minimum.

"Emoticons." These can be fun to use, but don't assume that they are appropriate. See if other people use them before putting them in your messages. In a wider sense, use the e-mail you receive as a guide. Different companies have different norms.

Students should also be alerted the dangers of e-mail. E-mail may seem intangible, but it can be more permanent than paper messages, and it's very easy to copy and distribute (Edwards, 1995). Anything inflammatory or embarrassing may be seen by many people. In the United States, employees have no right to privacy on a company e-mail system (Bianchi, 1996). In addition, U.S. courts have ruled that companies can be held liable for messages written by employees on company computers (Mamis, 1993). Users of e-mail should be as careful when writing electronically as they are when writing on paper, or more so.

Pearce (1996) has collected advice on company to company e-mail and posted it on the Internet. This site recommends usage of the same level of formality as a business letter, at least for initial contacts. He gives insight on the use of e-mail letterheads, signature files, capitalization, names and titles, with special consideration of international situations.

Teaching Business E-mail

With the lack of widespread standards and the changing technical landscape, teachers may wonder if it's worthwhile, or even possible, to teach "Business E-mail Style." There's no set of rules and formats that can be learned. The schematic "Parts of a Business Letter" diagrams still to be seen in many texts are of little interest to many students, and there's no replacement. Murray (1988) found that users acquired the conventions of CMC through modeling rather than explicit instruction. This finding is hardly counter-intuitive to the many of us who have learned "E-mail as a Second Language." She recommends teaching learning strategies, such as paying attention to language variation in different contexts, and modeling.

Clearly business e-mail is not something that can be taught by a teacher inexperienced in its use. Many students of Business English are already long-term users of e-mail in English, and a teacher must also be a user. The linguistic features of CMC arise from this new medium's unique characteristics. If a computer is the medium of student-teacher communication, these features will develop spontaneously (Liaw, 1996; Conrad & Rautenhaus, 1994; Wang, 1996). Alternatively, a paper simulation of e-mail communication would be hopelessly inauthentic. Students would be practicing English in a context that has no real-world counterpart.

Some language issues will only become apparent when communicating with students using their everyday e-mail system. There may be a misspelled word in a signature file. A student may have a habit of writing subject lines in all capital letters. Neither of these impede communication, but they will make an impression on the receiver, and it's unlikely that a business colleague will comment on this type of "error." Students using non-English e-mail programs may be sending messages with headers that are unreadable to English language e-mail systems. Though the body of the message may be unaffected, the senders name, subject line and date will appear as random gibberish. Again, receivers may not comment on this and the sender can remain unaware of the problem. Working out these bugs is one of the services a teacher of Business English can provide.

Byrd (1997), in a discussion of grammar teaching, argues that language must be learned in real contexts using authentic materials. "Researchers studying genre and discourse have shown that different types of communication have different grammatical signatures; that is, different types of communication make use of different grammatical structures and can be characterized in terms of those grammar items." By using e-mail with students who use e-mail in their jobs, teachers will greatly increase the likelihood that appropriate structures and vocabulary are practiced, without even needing to know what those structures and vocabulary are. Designing communicative activities that parallel students' real communication in terms of topics and functions will raise the effectiveness further.

The benefits of using e-mail for language teaching have been described in terms of enhancing student-teacher communication and providing teachers with student-produced electronic texts (Bauman, 1998). Creating students-student e-mail interaction, within a class or internationally, is becoming more common (Warschauer, 1995; Warschauer, 1996). Teachers are finding that e-mail is a powerful new tool, even for those students who don't use it outside of class. When e-mail is one of the mediums through which students actually communicate in English, its neglect is a real disservice.

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Assessment Dilemmas in a Language and Cross-cultural Training Program

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Abstract

The presenters will discuss the challenge of balancing qualitative assessment with standardized scores in an executive training program in Japan. They will examine TOEIC scores from their training programs, comparing them with other assessment means, and suggest ways to deal with companies' emphasis on TOEIC gains.

Introduction

The Intensive International Executive Program, or IIEP, is an English, cross-cultural, and business training program held four times each year at the International University of Japan (IUJ), in rural Niigata Prefecture. Participants in the IIEP are Japanese and Chinese business people who are preparing to enter the international business world, usually by taking a bilingual post in Japan or China or by going overseas.

At the end of each program the IIEP instructors prepare a Report to Company, which is sent to the company personnel director or the participants' division chiefs. Each report summarizes the major activities of each program, describes the progress made by the participant, comments on the adaptability, cross-cultural skills, leadership, and participation levels of the participant, and reports on the participants' scores on the Test of English for International Communication, or TOEIC, which is administered twice during each program.

Over the years it has become clear that TOEIC is the only English language assessment that is familiar to all the stakeholders in the IIEP, defined as the program participants, program instructors, and administrative officers and staff related to both, i.e., at IUJ and at the sponsoring companies. Programs that achieve a substantial average TOEIC increase are deemed successes by many program stakeholders, and the effectiveness of programs that did not end in TOEIC gains for their employees has been questioned by these participants and their sponsoring companies.

Recognizing that TOEIC cannot be eliminated from the program, the IIEP has developed several additional methods of measuring and reporting progress, participation, leadership, and other performance and skills categories, but the primary administrative stakeholders in the program and many participants continue to focus on TOEIC. In an attempt to accurately convey to companies what they can expect from individual IIEPs (of four-, eight-, and 10-week duration) in terms of TOEIC gains, the IIEP instructors examined the results from 400 TOEICs from the period 1992 - 1997.

Parts of this analysis are reported below. To summarize, the analysis found no pattern of TOEIC improvement that could be used to help companies match participants to individual programs or to predict the success of their participants in any single program. The corollary of this is of course that the IIEP is unable to predict individual or program gains based on program-specific average TOEIC increases from past programs.

Background on the IIEP and the use of TOEIC

In 1990 and 1991 the IIEP ran as a morning course in IUJ's Intensive English Program (IEP). The IEP prepares entering IUJ students for their two-year course of study in either international management or international relations. IIEP participants met for three hours Monday through Friday in a course entitled "Text Skills IIEP." This course dealt with business case studies, cross-cultural readings and activities, and leading meetings and discussions.

In the afternoons the IIEP participants were integrated with the IEP communication skills classes, which focused almost exclusively on presentation skills. The IIEP participants also took part in all IEP curricular and social activities, as well as the IEP pre- and post-program testing. This testing included TOEFL, and from 1990 through 1993 all IIEP participants took the TOEFL twice – at the beginning and end of the program.

In 1992 the IIEP ran separate from the IEP except for major social activities and computer instruction, which combined IIEP and IEP participants. At the request of company sponsors and at the suggestion of key IUJ administrators, the IIEP introduced TOEIC during the 1992 program as an optional addition to the required TOEFL exam. In 1992 half the participants chose to take both tests. In 1993 all but one participant took both. From 1993 the TOEFL was dropped, and TOEIC took its place.

The Current Program

In January 1996 the IIEP began to run throughout the year, as an eight-week Winter Program, a ten-week Summer Program, and four-week Fall and Spring Programs. All four programs follow the same basic daily schedule, divided into morning classes devoted to language instruction, and afternoon classes devoted to business training and cross-cultural activities.

The Morning Class curriculum is divided into two 90-minute classes that meet five days a week and total 15 hours of weekly instruction. The first class, International Business English, is built around a Business English text and listening and speaking skills are emphasized. The second class, Communication Skills for International Managers, consists mainly of participants leading Business Meetings and delivering Oral Presentations. The underlying philosophy of the Morning Class is to provide a familiar teacher-led environment during the first class and then move to a more participant-led focus in the second.

Business Writing plays a secondary role in the Morning Classes. Participants write weekly Business Journals on specific business topics, which are commented upon and corrected for both content and grammar. Other assessment in the Morning

Classes includes weekly comprehension quizzes and videotaped Oral Presentations and Business Meetings. Comments from the teacher about participants on Business Journals, quizzes, presentations, and meetings are given in the final Reports to Company.

Afternoon sessions offer a wide variety of activities organized by IUJ's MBA and international relations faculty, including cross-cultural activities and interaction with IUJ's international student body and frequent business presentations given by participants based on Internet research into business and culture in Asia. Afternoon assessments evaluate participation levels, oral presentations, case discussion skills, cross-cultural management skills, and leadership skills based on observations made by the IIEP and IUJ MBA and international relations faculty. Outstanding achievements by each participant on any afternoon activity are described in the Report to Company.

IIEP Stakeholders and TOEIC

IIEP stakeholders include all those at IUJ and at the sponsoring companies who have a stake, or interest, in ensuring that the program is effective. Table 1 shows the attitudes toward TOEIC held by the major IIEP stakeholders.

Table 1: IIEP Stakeholders and their Attitudes toward TOEIC

Program Stakeholders	General Stakeholder Attitudes toward TOEIC
program participants	Varied. About one half report that TOEIC scores are required for promotion or for postings overseas
personnel staff of sponsoring companies	Virtually all report that TOEIC is used in the company, along with "Eiken" rankings.
division or section chiefs at sponsoring companies	Anecdotal evidence is clear: Middle-level management expect participants to return to the office with TOEIC increases.
IIEP visiting instructors	Generally negative to neutral about TOEIC, particularly about TOEIC preparatory sessions.
IIEP staff	Recognize the importance of the TOEIC, and assist in the administration of the test.
IUJ management from the business world	Stress the importance of TOEIC to potential sponsors, but recognize that communicative skills are more important.
IIEP and IUJ marketing staff in Tokyo and Niigata	Place great importance on TOEIC gains, and include mention of program gains in all IIEP ad materials.
IUJ MBA and International Relations content faculty who contribute to the IIEP	Increasingly aware of the language learning goals of the program, but TOEIC is far from their primary concerns.

Problems with the TOEIC: Reporting and Marketing Dilemmas

The presence of TOEIC in the IIEP creates the expectation from most stakeholders that TOEIC scores will increase during the program. While 80% of all IIEP TOEIC scores have increased, these gains have not been consistent or predictable from one program to the next, causing some corporate stakeholders to question the quality of individual IIEPs and raising the question of what companies can expect from each program in terms of TOEIC.

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While maintaining the TOEIC in the program, the IIEP instructors have sought ways to influence the importance corporate sponsors place on TOEIC. This can be seen in the different ways that TOEIC has been dealt with in the Report to Company.

Table 2: Reporting TOEIC Results to Sponsoring Companies

Program	Reporting TOEIC Results
Summer 92	No mention of TOEIC scores on the official report. Scores and a brief analysis of them given in a personal letter written to each participant.
Summer 93	TOEIC scores included at the end of the company report, along with class averages for the test. TOEIC is not mentioned in the program summary at the beginning of the report.
Summer 94	TOEIC included on first page of the report, along with TOEFL scores and the results of an in-house oral proficiency exam. No mention of TOEIC in the text of the report.
Summer 95	TOEIC listed prominently in second section of the report, along with details of each participant's score and their score relative to the group. Attempt at explaining TOEIC losses.
Winter 96	TOEIC score listed in section 1 of the report. Program vocabulary test scores included alongside TOEIC scores. Attempt made to stress that TOEIC is but one element of the program's testing and evaluation.
Spring 96	TOEIC mentioned in a single sentence at the end of the report. Only the first, second, and gain/loss figures are given.
Summer 96	TOEIC included for the first time in the program summary at the beginning of the report. TOEIC results moved to the end of the report.
Fall 96	TOEIC moves back to the first section of the report, with a disclaimer that TOEIC scores were not as encouraging as they had been in the past.
Winter 97	TOEIC moves back to the penultimate section of the report.
Spring 97	TOEIC on the first page of the report.
Fall 97	TOEIC comprises first major section of the report, following the summary, and for the first time comparisons are made with previous TOEIC scores achieved by participants from the same companies. Increases relative to other participants are included when favorable for the participant. Report mentions past average TOEIC increases for the initial TOEIC score range of the participant, but only when the participant exceeds the average for that range.

The Scores

TOEIC is mentioned in all IIEP marketing materials, yet it is not clear from the TOEIC scores just who will achieve TOEIC gains in which program. Nor is it clear which aspects of any individual program can be offered as an explanation of why any single TOEIC score rose or fell during the program. Table 3 shows the size of each program, the amount of time devoted to TOEIC prep, score ranges, and the percentage of each group that did not show any TOEIC increase.

Table 3: TOEIC Related to Program Size, Number of TOEIC Prep Hours, Average TOEIC Increase, Range of TOEIC Scores, Percentage with No TOEIC Gains, and Range of TOEIC Entry Scores

Program	Size	TOEIC Prep Hours	Average Increase	High Gain	Low Gain	Range of Gain	% with No Gain	High/Low Entry TOEIC Range
Summer 92	28	0	19	140	-65	205	33	220
Summer 93	29	0	21	120	-110	230	40	385
Summer 94	39	0	135	275	0	275	3	650
Summer 95	28	0	37	150	-55	205	24	405
Winter 96	5	2	5	265	-40	305	50	270
Spring 96	6	2	101	115	90	25	0	160
Summer 96	25	4	93	265	-40	305	6	510
Fall 96	7	4	1	55	-40	95	57	550
Winter 97	7	4	126	235	35	200	0	495
Spring 97	11	6	27	115	-75	190	33	275
Summer 97	23	12	106	250	-30	280	5	500
Fall 97	9	4	38	120	-30	150	22	535

To summarize, the overall pattern of TOEIC increase is encouraging, but it is difficult to capture the TOEIC gain/loss patterns for any individual program, or from one program to the next. This is true also for the relationship between entry-level TOEIC scores and TOEIC gains. When viewed collectively, the scores show that entry TOEIC scores from 200 - 600 have achieved the greatest gains, as might be expected. However, this is far too great a range to be of use to companies who have to select participants for the program, and in any case the entry/gain argument breaks down at the program level, i.e., when entry level scores for each program are compared to the individual TOEIC increases for the participants in those programs.

Reporting TOEIC: Anomalies

Adding to the overall problem of reporting TOEIC scores to sponsoring companies are those scores that seem to be anomalies, as for example when two participants from the same company with similar skills achieve very different TOEIC gains, when a participant strong in every other area drops in score, or when a participant's listening and reading increases vary to a great degree. Table 4 lists listening and reading increases for 19 participants whose listening/reading improvements differed by 100 or more points.

Table 4: TOEIC Anomalies

Listening Improvement	Reading Improvement	Range
180	-40	220
110	5	115
105	-5	110
105	-40	145
95	-40	130
80	-45	125
70	-30	100
45	-120	165
10	110	120
5	125	130
0	120	120
-10	105	115
-10	95	105
-15	125	140
-30	95	125
-45	65	110
-55	45	100
-60	45	105
-75	80	155

It always tempting to ascribe drops in reading scores to the participant's inability to finish the TOEIC in time. However, only one listening/reading improvement pair (45/-120) in Table 4 would warrant this explanation.

The Future: Alternative Approaches to TOEIC

The IIEP accepts the challenge of training any participant, regardless of their English language skills, and each program is tailor-made for each group, within the common morning and afternoon framework discussed above. The program instructors begin to make adaptations to each program as soon as participants applications begin to arrive, generally 2 - 6 weeks before each program, and continue to do so until the last week of each program.

Also, the IIEP trains and evaluates each group independently of other groups. Participants enter the IIEP only once, and so cannot be tracked from one program to another, or from one level to another. Indeed, the concept of level does not fit with the IIEP in general – participants arrive with different skills sets, respond to challenges of various types with those skills sets, and are assessed as individuals according to how well they were able to apply and expand their skills during the program. Consequently, the Report to Company concentrates on what each participant did, how much they participated, to what degree and in what areas they progressed, and what kind of training the participant should pursue after the program.

Given the importance of TOEIC in Japan, its familiarity with the IIEP stakeholders, and recent assurances from ETS that the test will be improved in the near future, the IIEP cannot afford to give up the TOEIC. At the same time, as this paper has tried to show, the IIEP also cannot sell TOEIC increases to its sponsoring companies on a program-to-program basis, despite the fact that 80% of IIEP participants have achieved TOEIC gains over the years.

Rather than attempt to alter the IIEP to achieve more reliable program-specific TOEIC gains, and rather than create an in-house assessment system that is unlikely to replace TOEIC in the minds of sponsoring companies, the IIEP has begun to gather more information from companies: (1) about how sponsoring companies measure English improvement in-house, and what kind of training they provide; (2) about what improvements they expect their participants to make in the IIEP; (3) about what specific information they would like to have included in the Report to Company; and (4) about the relationship between each participant and TOEIC, i.e., the importance they attach to TOEIC, how many times they have taken it, their experience with other standardized tests, what self-study or organized English courses they have pursued, what score they hope to attain during the program, and to what extent they would like to be a part of TOEIC prep classes during each program.

The goal is to make TOEIC an individual priority, not a program one, and so an aspect of each program that we can report to companies in terms of the individual participant's needs and focus. Reaching this goal would bring the TOEIC in line with other elements of the IIEP that focus on individual achievement.

Collaborative Interaction in Networked Writing Classrooms: The Student Experience

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Abstract

Networked writing classes are likely to become more popular in Asia with increased emphasis on collaborative learning and an institutional focus on technology. While the claims and counterclaims about the benefits of networked writing for EFL students are numerous, one thing is clear: establishing a networked writing classroom is not a matter of simply installing computers and providing technical facilities. A focus on such concerns does not answer the question whether networked technology is useful or feasible in an Asian context. This aim of this paper is to explore and analyse students' comments about their experience in the networked writing laboratory, in particular their opinions of the usefulness of networked writing to allow improvement in their writing and also to allow meaningful peer feedback. The data on which this paper is based are part of a larger set collected from four Introduction to Academic Writing classes at the Chinese University of Hong Kong. These comments also provide some indication of which of the claimed advantages and concerns of networked writing discussed in the literature are founded, and which may be baseless. While most students enjoyed collaboration in real time writing mode, over 25% did not feel that it had improved their writing. This and other issues that were raised by the students should assist administrators who are considering the implications of a move to a networked writing environment. They should also assist teachers who are working in the networked writing laboratory to prepare more effective on-line collaborative classroom activities.

Networked Writing and Collaborative Learning

The use of networked writing in Asia is still in its infancy. This is surprising, as several Asian countries (including Japan, Korea, Taiwan, Singapore and Hong Kong) have high levels of computer ownership and an institutional focus on computer and information technology. However, given trends in the USA, where Blythe (1997) points out that "administrators have been rushing to add networked computer technologies..... to their repertoire of [writing] services," and the recent interest in the topic in journals and at conferences, an increase in the use of networked writing in Asia seems inevitable.

Networked computers in the writing laboratory provide students the chance to interact through writing in real-time to other students and the teacher. Networked computer classes (or synchronous Local Area Network (LAN) conferencing) have added a new and potentially interesting dimension to learner-centred second-language writing classes and the development of learner autonomy through written collaboration. Collaborative learning is claimed to be beneficial in L2 classrooms as it provides opportunities for modified input, it creates a low anxiety context, and provides more chance for language practise and more comprehensible output. But positive outcomes of collaborative learning are not automatic and Evelyn Jacob et al (1996) suggest that the reason that collaborative learning studies in everyday classrooms report mixed results is that their carefully planned implementation is not replicated in actual classrooms.

The networked writing classroom - conclusions from the literature However, a review of the literature on networked computers in the writing classroom shows that most writers are positive.......with qualification. Braine (1997), in a comparative study concluded that the networked laboratory produces better writing and more teacher and peer feedback than the traditional class, but that there was more improvement in essays in the traditional class. While he ascribed this to the fact that students' first drafts in the networked laboratory were closer to their ability 'ceiling,' it is not possible to attach too much significance to such comparative studies as there are many confounding 'situational' variables.

Peterson (1997) provides a balanced coverage of some of the issues involved in computer networking as a learning tool. These issues include the suitability of networked classrooms to meet ideal learning conditions through communicative effort in negotiating meaning; the development of learner-centredness and learner autonomy through a less-restrictive environment than traditional classrooms; increased interaction though the willingness of learners to take the initiative in discussion; the redefinition of relationships as learners gain more control over content and participation roles; increased authenticity of discourse compared with a pseudo-communicative nature of oral discourse in the teacher centred class; the equalising nature of the technology on a normal social discourse hierarchy; increased writing output and reading input; and enhancing increased personal engagement and discovery learning.

However, Peterson also points out limitations can arise from lack of computer and typing skills among students; a lack of technical support; information overload; and inability to deal with redefined conventions such as the absence of non-textual context clues. Lack of active teacher input can also lead to student apathy after initial excitement. Beauvois (1997) also discusses the drawbacks of networked writing laboratories. These include the unwieldy nature of the student output; lower control of content and learning direction than a teacher-driven classroom; problems for "auditory" learners with the almost entirely computer mediated input; and frustration with the technology. She also mentions that some learners (and teachers) may not feel comfortable with a learner-driven classroom, an observation which may be especially true in an Asian context (Roskams, 1996).

The literature does not appear to provide clear directions for language teachers. For example, Sullivan and Pratt (1996) point out that networked computers may have more advantages for the ESL writer than for the native speaker writer as they offer the less proficient speaker more time to think about what to "say." (p.492). But Ruth Kivela (1996) points out students' language limitations have an opposite effect: she notes that ESL/EFL students may have difficulty collaborating in writing, because of their slower processing and productive skills which keep them from participating fully. At Chinese University we observed that student output in the writing laboratory is more fragmentary and incoherent than in oral discourse because of the time lag in responding to issues. In the voice of one student, "It is very frustrating that the discussion topic has changed when we are ready to send our message." Since some learners do not have time to adequately read and respond, they are forced to choose to focus on one or the other.

While the claims and counterclaims are contradictory, one thing is clear: establishing a networked writing classroom is not a matter of simply installing computers and providing technical facilities. A focus on such concerns will not solve the question about whether networked technology is useful or feasible in an Asian context. This aim of this paper is to explore and analyse the student voice, to provide some indication of which of the claimed advantages and concerns are founded, and which may be baseless.

Subjects and Setting

Four *Introduction to Academic Writing* (IAW) classes were surveyed. Each consisted of approximately 20 students (total = 74) attending a 13 week course at the Chinese University of Hong Kong. This course aims to develop informative and persuasive writing skills in English based on library research and was conducted in a networked writing laboratory. The laboratory consists of 23 networked computers - 22 for students and one teacher console - and the working platform is the *Daedalus* integrated writing environment (DIWE). Students used the networked computers to provide feedback on drafts of other students, and also to exchange ideas for assignments (e.g. working titles and tentative thesis statements) with the other students and the teacher, who would respond, leading to a whole group or small group discussion on the network. The discussion (or conference facility) in DIWE is known as *Interchange*. Smaller conferences of three, four, or five students were most often used to make the volume of information more manageable

Methodology

Students in the four classes were surveyed in the penultimate week of the term using a questionnaire. Students were asked give their feelings before using the networked computers, and reasons for any changes in feelings over the term. Students were also asked to comment on the usefulness of *Interchange* and do likewise for on the usefulness of suggestions on drafts of their work from other students in the group. Only two of the questions are analysed in this paper.

As participation in the survey was voluntary, there were a total of 64 responses from the 74 students (86% return rate). Student comments were collated and analysed. Based on this analysis eight classifications of comments (pertaining to the major focus of the comment) were derived as follows:

1. Collaborative Learning (C)
2. Time (T)
3. Thinking Skills (M)
4. Interest /Enjoyment (I)

5. Comments about Writing Development (W)
6. Personal Comfort with the Delivery Mode (P)
7. Curiosity (Y)
8. Unclassified (U)

Those comments which did not fall into any of the first seven classifications were 'unclassified.' If a comment dealt with two or more issues and could be split, this was done if the meaning did not appear to be changed by so doing. There are obvious limitations in this study due to problems with reflective questionnaires and a certain element of judgment being required to decide in which of the categories many comments fell, and even in some cases whether a comment was positive or negative. However, it was usually possible to place a comment without doubt. The category *Curiosity* was not used in this study as there is not clear positive or negative connotation from these comments.

Student Impressions: The Usefulness of the Networked Writing Laboratory to Improve Writing

Students were asked to comment on the usefulness of *Interchange* for improving their academic writing in English. The comments were classified as follows:

TABLE 1

Classification of Open Comments about the Usefulness of *Interchange* for Writing Improvement

CATEGORY	POSITIVE	NEGATIVE	TOTAL
Collaborative Learning (C)	20	6	26
Time (T)	1	12	13
Thinking Skills (M)	5	0	5
Interest/Enjoyment (I)	1	2	3
Comments about Writing Development (W)	5	1	6
Personal Comfort with Delivery Mode (P)	1	2	3
Unclassified	1	2	3
TOTALS	**34**	**25**	**59**

In this question, students focused on the benefits of collaboration but had significant reservations about the time constraints that the technology imposed on them. Some typical comments were:

Collaborative Learning (C)

- + Because we can read each other's writing through Interchange and can learn more from others.
- + I can learn from other students.
- + I can look at other peoples' opinions and recognise the mistakes by myself.
- + I can read others' writing and learn others' way of writing.

- + Improve my English through sharing essay with classmates.
- + More interaction with others, thus larger scope of opinions about the writing, also giving comment in the form of writing is practice of writing at the same time.
- + We can give opinion to each other and as there is no talking, the classroom is quiet.
- - I cannot really interchange with other classmates with the Interchange.
- - Only useful if my classmate is critical enough to point out what improvements I should make in my work.
- - Sometimes it's difficult to concentrate on a topic, since partners usually 'drift-around' the topic.

Time (T)

- + My partners can give me comments immediately.
- - After we have finished our own work and typed into computer, there was little time to read the others writing.
- - Because I usually have not got enough time to read other students' writing.
- - Not good at typing. Thus using most of the time to type only 1 to 2 comments.
- - We will use much time in thinking and typing the answer and we have got not much time to see other people's idea.

Thinking Skills (M)

- + Help us to think quicker
- + This help a lot in solving problems.
- + We can express our ideas immediately so that it can stimulate our thinking.
- + Can force us to think in English and write (type) in English.

Interest/Enjoyment (I)

- + Using interchange can also make the lessons more interesting.
- - It's not so interesting.

Comments about Writing Development (W)

- + It makes us type more carefully and grammatically.
- + Practices my written English.
- + We can 'writer' faster and therefore we write more and practice more
- + We can practice our writing skills during the process.
- - The language used in the Interchange is not as precise as those used in academic paper.

Personal Comfort with the Delivery Mode (P)

- + Peer review is frank and reasonable, less pressure when facing comments.
- - Group discussion in words would be better and more efficient.
- - We can do the same thing even without the network computer.

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Student Opinions about the Usefulness of their Peers' Comments

Students were also asked to comment on the usefulness of suggestions on drafts of their own work from other students in the group. The results were as follows:

TABLE 2

Classification of Comments about the Usefulness of Peer Response on the Network

Category	Positive	Negative	Total
Collaborative Learning (C)	41	14	55

Most students found the collaborative learning in the NWL was a useful experience although some felt that they could not improve their writing through comments from their peers. Some typical observations on the value of peer comments were as follows:

Positive

- + some mistakes that I can't find by myself.
- + Comments collected help to improve the drafts.
- + Different points of views are collected for the essay.
- + Find out the mistakes that I have. However, sometimes, we will make some other mistakes.
- + Good to get some ideas that you never think about it.
- + I can discover some weaknesses in my essay that I can't find before.
- + I can hear more opinions from different people so as to improve the content of my work.
- + I will have improvement from their opinions.
- + Other students can help me to realise my careless mistakes.
- + Other students can point out the mistakes that I can't see and teach me the pattern which is better.
- + Other students comments are very useful as my English level is very limited.
- + They are able to pick up mistakes which are unaware by the writers. And feedback from reader is important.

Negative

- - Classmates may not take it seriously.
- - Comments are not always helpful.
- - I think that they are not concentrated correctly on my work.
- - It is quite difficult for your classmates to give professional comments.
- - Not all students are able to give better suggestion. It is more suitable for professor to do so.
- - Some classmates cannot give very appropriate or serious comments.
- - Sometimes their suggestions are not correct and they may misinterpret my meaning.

- - Time wasteful as other classmates sometimes do not give much help on improving the essay. If the other students do not prepare before the lecture; it is time wasting for the discuss part (very low productivity).

Analysis of other student comments showed that students whose writing was more developed tended to find that the feedback from other students was less helpful than vice versa.

Implications

What are the implications for teachers and administrators from this brief survey of published research and from the comments of our students? Most importantly, while most of the students felt that the peer collaboration afforded by the networked writing laboratory was useful, more than one quarter did not and this is problematic if the networked laboratory is to be used as the major teaching mode in a process writing class. Our observations that the lack of usefulness of peer comments seems to be due to the inability of a student reviewer to be critical of a student writer's work - either due to limitations of language, or social convention, or inability to think critically and systematically about another's writing, even after a limited period of training.

The statements made by students do not necessarily express their full range of concerns about using the DIWE or peer feedback. But they do provide some interesting comparisons with the issues raised in the literature which emphasised the positive effects on collaborative learning and to a lesser degree the technical issues. All the major student concerns were at least mentioned in the works which were reviewed.

But the findings of this study indicate that while students have the same concerns mentioned in the literature, they view these in a different manner. For example, while the literature did not put much emphasis on the sorts of concerns that students might have about initially joining a networked class, another study using survey data from the same source as this one (Curtis and Roskams, 1997) showed that these concerns were frequently mentioned and many students initially felt quite uncomfortable. This discomfort was not generally about the style of learning or their changing role in a collaborative classroom (issues discussed in the literature), but about their computer competence. Even though nearly 90% of the students had used computers before, for an average of approximately 3 years, many were still anxious about using computers in a teaching/learning mode, including repeatedly mentioned concerns about slow typing speeds. Therefore, either before starting or at the start of networked usage, some time and resources may need to be put aside for such training and/or 'acclimatisation.'

The issues of culturally-contextualized assumptions about roles and responsibilities brought out in some of the literature did not seem to be as much of a direct issue as expected, with few students alluding directly to these concerns. In terms of collaborative learning, the literature tended to focus on empowerment and the learner-driven classroom. Generally however, students did not comment on this except a very few who did so negatively, preferring more teacher input. However, students were quite overall positive about collaboration, from first, the point of view of the interest it generated in the classroom and second, the help that other students were able to offer them in improving their work in terms of both correctness and integrating a wider variety of opinions. But it is also clear that many students found that collaboration was a frustrating experience, particularly if their group members had lower language proficiency than they did or did not appear to take the collaborative tasks as seriously. In the latter case, if the teacher monitors group discussions, 'sorting' student comments by student (This can be done using *Interchange*) to make it apparent which students are not contributing effectively, the reason can be explored with the individual student.

When establishing the collaborative groups (after enough classroom activities for the students to get to know each other), it may be useful to consider whether the groups should be streamed according to language proficiency. This may lead to more effective collaboration in some groups but create some quite dysfunctional groups. If more advanced and beginning learners are mixed, it is necessary to explain to the more advanced learners that they should consider giving feedback as a useful learning experience and additionally, that the teacher will spend more time with them in exchange for their help to other students. At the very least, all learners should be carefully trained in discussion discipline and in providing the different kind of responses than they are used to in oral discourse. Students also need to know that the type of short and chatty email exchanges they are used to sending are different from the type of comment they need to send in order to give helpful and constructive feedback on another student's written work. But, equally, they also need to be aware of the importance of giving criticism carefully and tactfully.

Teachers should note that it takes time to set-up the activities on the network for each lesson in advance. The literature also pointed out some of the limitations on time during the actual classroom sessions, largely due to typing skills and slower language processing that students in this survey also commented on. This slowness was one of the major concerns of students. It is important for an instructor not to try to attempt too many activities in a normal lesson and to provide very clear instructions. Allied with the newness of the technology to some students, the necessity to process lot of written information from various sources, and then respond it, some students found it difficult to process all the information and became passive 'readers' or alternatively writers on topics that were little related to the group online discussion which had 'moved on' by the time they had responded. In the words of one student, "There may be times when you want to say something about one point and while you are typing the discussion has already shifted to another point."

In addition, it took time for students to clarify their perceptions of roles and responsibilities in the context of the networked writing lab environment. In the words of a student, "A serious problem arises when discussion is done on computer - it requires the group to be familiar with each other and have a good leader." Even though groups elected a leader and a time-keeper in each session, along with a clear focus, some never developed enough discipline to prevent the fragmentation of discussions that is mentioned above.

In terms of developing writing skills, students were mixed in their opinions. Many appreciated the feedback from other students for both accuracy and improving the quality of ideas in composition, as well as forcing them to consider the reader more carefully. A few students also commented on the fact that the faster response forced them to 'think' more in English, although this requirement was a barrier to lower-proficiency students. Some found the difficulty in processing information to be a barrier to the participation needed for writing improvement. A few commented on the increased fluency that developed through practice, mirroring the comments in the literature about generating more written output than the traditional class.

The literature did not emphasise the novelty and interest of the environment to the degree that students commented on. However, the opposite side to this initial excitement is the problem of an initial interest later turning to boredom. It is clear from our findings that this is an important issue for teachers to address. Students need to know that initially the whole process may be slowed down until they are familiar with the system before an increase in collaboration efficiency can occur. In addition, activities need to be varied and the teacher needs to maintain an active presence in the class.

It is unrealistic to expect that more students can be served using the same resources or that client contact time can be decreased a result of using networked writing modes and collaboration/peer feedback or that all tutors and students will welcome the shift in roles that a move to networked writing entails or find the transition easy. However, the move to a networked writing environment may be a quite useful new avenue for student-student and student-teacher collaboration if there is a willingness to accept the need for time and resources to train staff and students in new roles as well as technical mastery of the environment, and if there is a commitment to ongoing technical support and assistance.

Acknowledgement

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Survey Questions:

How useful was using *Interchange* for improving your academic writing in English? Please give reasons for your assessment of its usefulness.

Using Interchange: not useful <---------------> very useful

Usefulness: 1 2 3 4 5 6

Reason(s): ____

How useful was receiving comments and suggestions on the drafts of your own work from other students in the group.

Receiving Comments: not useful <---------------> very useful

Usefulness: 1 2 3 4 5 6

Reason(s): ____

Nursing Matters

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Abstract

This paper introduces an ESP English course for nursing students at Miyagi University, a newly opened university in Miyagi Prefecture, Japan. The history of the development of the course is discussed and the final text and teaching methods are described in the hope that they will be of interest to others who are considering the development of such a course.

The Beginnings

The establishment of Miyagi University (MYU) was approved by the Mombusho (Japanese Ministry of Education) in January, 1997. The first students were accepted and then began classes in April, 1997. The student body included a class of 89 students enrolled in a four-year nursing course. This paper, which retains much of the casual style of the presentation on which it is based, addresses the development of a freshman English course for these students.

I first became involved with MYU in the Fall of 1995, when I was approached by prefectural officials and asked if I would consider becoming the Director of the Language Center. As part of the vetting procedure, I was asked to develop a complete English program for both the university students and adults from the outside community. I was given no criteria nor was I given any goals. I was simply asked by the President-designate to design whatever I thought was appropriate. I strongly believe that goals should guide curriculum development but I had none in this case, so as people often do in a case like this I fell back on previous experience.

While teaching at Trident College, Nagoya, Japan, I had supervised the development and application of a content program for teaching English (Adamson & Moneyhun, 1986). On the basis of student feedback, teacher feedback, grades, and standardized testing, I had realized that such a program could to be very effective and had become convinced that content is often, if not always, a more appropriate vehicle for learning English than the language itself. After leaving Trident, I worked at the Shizuoka Institute of Science and Technology, a four-year university for technical students. Although I worked on the set-up committee for a month before the university opened, I had not been involved in the setting up of the curriculum. However, during the third year of the school's existence I was elected coordinator of the English teachers and was assigned to the committee to revise the entire curriculum. Partly due to my insistence, it was decided to introduce a content English class for the engineering students. Although I left the university before the revisions were completed, I became even more convinced that content is frequently an optimal approach to language teaching.

In view of these experiences, I decided that, in the absences of specific goals, a content approach would be my best choice for the MYU nursing students. The

MYU Set-Up Committee was using a procedure of successive approximations to develop the university-wide curriculum, so I received information (sometimes final and sometimes transitory) in small chunks and was forced to revise the proposed curriculum many times.

At one point after I was actually hired and officially working for the MYU Set-Up Committee, I finally had a chance to meet with the Dean-designate for the Nursing Department and find out what she expected from the English courses. She indicated that there was a legal requirement that the students have at least 120 hours of college English in order to get their license upon graduation (Ministry of Health and Welfare, 1993, pg. 43). She wanted this requirement met during a first year required course. She indicated that for this course she wanted a basic communicative English curriculum with a large amount of stress on listening and speaking. Later courses would be electives with the primary goal of preparing the students for the reading assignments that they might receive in graduate level nursing courses.

At this point it became possible to begin to plan an actual curriculum. It was obvious that the Dean's requirements could be fulfilled within the ESP type course that I had been considering. I also decided that it would be effective to incorporate some ideas from accelerated learning.

I received formal training in Suggestopedia in 1979 and have been experimenting with ways of adapting the method for use in Japanese college classrooms. I have developed a methodology called "Integrative Teaching" (Adamson, 1995). This method uses a long narrative story as the basis of a course. During a unit the students read a chapter consisting of about 2000 running words. The classes are arranged so that the students read the text three or four times and do activities related to the story. The details as they apply to the MYU nursing course are described below.

The MYU Set-Up Committee determined that the ESP Nursing English course would meet for three 90-minute periods a week. I arranged the schedule to insure that a group of students always met with the same teacher. This provided the contact time and continuity that are necessary for Integrative Teaching to work successfully.

The next order of business was to prepare the text. MYU policy insists that each semester consist of a full 15 weeks. This meant that one semester would involve 45 classes, with 90 for the entire year. Considering tests, reviews, and expansions I decided that 10 chapters a semester would be appropriate. This would allow an introductory week and four weeks of review, expansion, and tests during the first semester and, during the second semester, three weeks of review, expansion, and tests plus two weeks at the end to read and work with one of the basic nursing texts (Henderson, 1969). I decided to give 90-minute tests at the end of the review and expansion week following Chapters 4, 7, 10, 14, 17, and 20. There would be no test on the Henderson paper and it will not be mentioned again here.

After some brainstorming with the teachers involved, I began working on the plot design for a story about a nurse. She was going to work at a large hospital and the plot was to be a human drama revolving around the people and events in her life. It was to be a melodrama with a cliffhanger at the end of each chapter. Once the story was more or less plotted, I was not very happy with it. I got feedback from one of the other teachers, and we decided that the story would not work very well. One of the main reasons for this was that the story tended to naturally involve a lot of conflict, something that we did not think was appropriate. A further point was that the nurses in the story would have strongly defined characters and personalities. We thought that this might make it hard for out students to relate to them. Also the plot required more knowledge of nursing procedures than we had and that from a point of view that did not seem to have much potential for being developed into classroom activities of the communicative types that we planned.

Finally the teachers were called to a weekend long working meeting at which a new story was plotted with a cliffhanger at the end of each chapter and the characters were given backgrounds, personalities, and other personal data. This plot revolved around a family that had numerous medical problems and thus interacted with doctors and nurses. This plot seemed to allow us the most flexibility in designing class activities. The family members and non-medical characters had well-defined personalities and backgrounds, but the medical personal, especially the nurses, were less defined. This would allow the students to build personalities for them.

The Story

Basically the story is a melodrama that revolves around a series of increasingly serious medical situations that effect the lives of the characters. There are a variety of interwoven themes, including the various medical problems, a growing friendship and its violent ending, the beginnings of a love story, the interactions between the various characters, drug use, alternate medical treatments, alternate lifestyles, teenage pregnancy, and the ethics of transplanting bodily parts. All of these and much more are brought out and exploited in the classroom. A list of important characters and chapter synopses are given in the appendix.

The Text

The final story is the result of collaboration between myself and Professor Lyn Doole, MYU. It is of high interest to the students. We know this because they frequently voluntarily read the English version of the text in order to discover what happens next. They can not wait the few additional minutes that it will take for the translated version to be distributed to the class. Each chapter consists of two parts: an English only text and an English/Japanese version. The English only version is laid out to resemble a normal English novel, except that it is A4 sized and line numbers are given in the margins. The English/Japanese version is laid out in the form of a long table where each English sentence appears in a vertically separate box. The Japanese translation appears in a corresponding box on the right of the original English sentence. We are now in the process of revising the text. Where appropriate, the new edition will have vocabulary, idiom, and cultural notes added to the boxes.

The Classes

One of the strong points of using a novel as the basis of the class is that there are many different ways of exploiting it. One of the teachers is using traditional teaching methods, including one period a week in the Language Lab. Another teacher is using cooperative learning. I am using Integrated Teaching, the version of accelerated learning that was mentioned above. In the following I will detail my classes.

Classes are on Tuesdays, Wednesdays, and Thursdays. I use one week to cover a chapter. On Tuesday I give a suggestopedic type concert session and on Wednesday and Thursday the students work with the text and elaborations.

The Concert Sessions

The concert session consists of two readings of the text: the active session and the pseudo-passive session. Details can be found in Lozanov (1988).

During the active session, the first reading, the teacher reads the text aloud, slowly and clearly, following the rhythms and volume of the classical music that is playing. New words can be extended to two beats per syllable to give them stress. Metaphorically speaking, the teacher makes his or her voice resemble another instrument in the orchestra. This music is what Lozanov (1978, 270) calls "emotional." Much of the music composed by Hayden, Mozart, and Beethoven fits in this category of music, which exhibits wide swings of volume and changes of rhythm. While the teacher is reading, the students follow along in the bilingual text, marking new words or other interesting points. This is the reason for the term "active." The students are active with their pencils.

During the pseudo-passive session, the second reading which immediately follows the first reading, the students sit back and close their eyes as they listen to the teacher read the text again. They are given the suggestion that they visualize what is happening in the story. This time the teacher reads with normal intonation. Lozanov (1978, 270) calls this music "philosophical" and some compositions by Vivaldi, Corelli, and Mozart as well as others fit in this category, which tends to exhibit steady rhythms and volumes. Much of it is organ music.

At the end of the second concert session, the students are released for the day.

Elaborations

The remaining two days of class are used for the elaboration, which consists of the alternating periods during which the students read the text or do activities.

Reading the Text

The reading of the text is done with a procedure called "shadowing" which was first brought to my attention by Dr. Tim Murphey, Nanzan University. The way that I do shadowing in the classroom varies as we move through the text. In the first weeks the teacher reads a phrase and the students repeat it while looking at the text. After a few weeks the teacher reads continuously and the students read aloud at the same speed. As soon as the students are proficient at this, the teacher introduces a new procedure and alternates it with the previous two. This new procedure is simple; the teacher reads a phrase and the students repeat it without looking at the text. The length of the phrases is gradually increased and the length of the pauses is gradually decreased so that the students are soon repeating as the teacher reads. Early in the second semester, the students are placed in pairs and one reads while the other repeats. Their reading speed gradually increases as they have more and more practice. Shadowing speed follows along naturally. The students enjoy doing this and there is a lot of laughter when they are in pairs. While there are many benefits to be gained from this activity, the primary gain is an increase in the length of the student's verbal memory for English, a vital component of increasing competence in the language.

The Activities

The reading of the text is periodically interrupted for the students to do an activity based on the language or ideas contained in the passages they have just read. In my classes I use many information gap activities based on pictures, additional readings, etc. The students also make up and tell stories that explain sets of facts about themselves or the characters in the text. I attempt to vary the activities as much as possible so that the students are constantly doing something new. At the beginning of the year these activities are fairly structured but become less and less so as the year goes on. The students also do role-plays based on situations in the text.

From the very beginning I encourage free conversation in which the students use English to talk about subjects of their own choice. At the beginning of the year I use structured activities like the following:

The students are given some sentence frames from the text and asked to generate new sentences. For example, a sentence in the section of the text that they have just read may read "As she is speaking, her grandfather enters the room." The students would be given the frame "As she is XXXing, someone YYYs." They are given four or five frames and asked to write new sentences based on their own experience or their imagination. When they have finished, they are placed in groups. One member of the groups is selected to role play a famous person and the others become reporters. The 'famous person' then reads one of their sentences and each of the 'reporters' must ask at least two sentences about the content. Usually at least one of the groups finds something interesting and begins a real discussion in which they are trying to get information from each other. When this happens, I let the activity continue even though the other groups may have finished. Using non-verbal language I make it clear that the group that is actually conversing is doing what I want. After that it becomes easier and easier to get the students to actually talk to each other. I never know exactly which activity is going to be the one to trigger a real conversation, but I keep giving them activities of this type until it happens. Soon after this happens for the first time, I can give the students a suggested topic from the text, but make it clear that as long as they are speaking English any subject is acceptable.

During the elaboration, I occasionally do visualizations as a lead-in to another activity. I also give the students dictations based on the text. At the beginning I read the sentences, but later I have the students work in small groups, reading the sentences themselves.

The above has barely touched on the possibilities. The activities that are done in class can be selected to fit the teacher's methodological preferences. Just about anything that the teacher believes in will achieve positive results. As long as the teacher is able to congruently present the activities as a way to learn English they will work.

Review and Expansion

During these classes the plot is reviewed and the students do activities based less on the text than on associated ideas. The review is the least communicative part of the course, because the goal is the mastery of clearly defined data rather than communicative ability. The expansion, however, is probably the most communicative because the students are putting forth their own ideas about things that are not actually stated in the text.

Plot review is accomplished through both teacher and student generated materials. Teacher generated materials consist of exercises which force the students to review the plot and the characters. For example, the students might be given a list of words from the text and asked which character they refer to or they might get a summary of the plot with the paragraphs scrambled and be asked to put them in order. An example of an activity based on student generated materials would be a class in which the students first wrote a description of one of the characters without naming the character. Other students would then read the passage and guess which character was being referred to in the passage.

Expansion activities extend the ideas from the text into new areas. Storytelling is a frequent activity here. The students are asked to think about a situation in the text and tell a story about something that happened to them. This story is to somehow relate to the situation in the text.

Testing

Since this is a required course, we decided that students who study should be rewarded with a higher grade. We also know from experience that students save exams and pass them to the following years' students. Therefore, we have decided on the following testing procedure. We are writing numerous true/false questions about each chapter. When we have a few hundred per chapter, we will make the list available to the students. Tests will use questions drawn randomly from the lists. Tests are open book (English only version of the text and a dictionary) and 90-minutes in length. Each test consists of more than 200 questions and is machine scored. So far the averages on the tests have been right around 70 points.

Grading

Each semester the students take three tests. Of these the two with the highest grades are selected and each carries a weight of 30% of the final grade. The other 40% of the grade is based on attendance and classwork.

Conclusion

While this course has not yet been used for a full year, the teachers are quite happy with it. The feedback from the students is positive and they have become engrossed in the plot. We have no external measure with which to check the students' progress, but the teachers see sufficient progress in their classes to wish to keep the course in place. We are now engaged in making small changes to the text so that the classroom activities that we wish to use are more closely integrated to the plot. We also hope to add some vocabulary and plot/character centered review activities to the appendix that contains the translations.

The experience of preparing and teaching this text has further reinforced my belief that ESP through content is a viable and even preferable way to approach language teaching.

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Appendix: Plot Outline

The following Chapter synopses appear in the text at the beginning of the appropriate chapter. The information in the parentheses does not appear in the text but is added here for clarity.

The following are the main characters:

Valerie Thurber (the mother)
Vernon Thurber (the father)
Bryce Thurber (the son)
Beverly Thurber (the daughter)
Starlight (the Thubers' ex-hippie neighbor who is an expert on alternative medicines)
Taro (a Japanese exchange student who becomes Bryce's friend)
Maria (one of the nurses who becomes Bryce's love interest)
Additional nurses and doctors who appear for varying lengths of time

Chapter 1: The Unwanted Telephone Call. In which the women of the Thurber family cannot complete the census form by themselves; Willard cannot find his glasses; Nurse Wilson arrives to dress Thelma's foot, and then shows the Thurber women how to complete the census form; and an emergency telephone call is received.

Chapter 2: At the Hospital. In which Willard complains about Starlight working on his motorcycle in the driveway; Vernon calls home from his car while on the way to the hospital; Nurse Wilson tells Valerie, Beverly, and Thelma what will happen to Bryce at the hospital; Bryce answers Nurse Jones' questions in the Emergency Ward; Dr. Smith's preliminary diagnosis is cystic fibrosis; and Dr. Smith decides that Bryce needs an immediate emergency procedure.

Chapter 3: In the Emergency Ward. In which Bryce is X-rayed and has an operation; medication is prescribed and a sputum culture done; Vernon arrives by himself to see Bryce; Vernon spends time in a waiting room but cannot smoke; Starlight and Valerie arrive; there is talk about some alternative treatments; and Bryce thinks he is going to die.

Chapter 4: A Visit with Bryce in the Hospital. In which Willard has a fit; Valerie calls the hospital about visiting hours; Samantha goes fishing; the Thurber family decide who is going to visit Bryce at the hospital and who will stay home with Willard; and Valerie and Vernon see Bryce and talk with Dr. Hotchkiss.

Chapter 5: Cystic Fibrosis. In which the Dr. Hotchkiss gives a difficult explanation of cystic fibrosis, Nurse Jefferson explains it so the Thurbers can understand, the family discusses the disease, Starlight gives his version, Samantha goes fishing again, Nurse Wilson explains more about cystic fibrosis, and Vernon collapses.

Chapter 6: Vernon goes to the Hospital. In which Nurse Wilson says Vernon has had a heart attack, Thelma calls an ambulance, Vernon and Valerie ride to the hospital in the ambulance, Valerie talks to Nurse Jones, Doctor Smith examines Vernon, and Doctor Smith explains Vernon's condition to Valerie.

Chapter 7: In Bryce's Hospital Room. In which Nurse Jefferson tells Bryce what happened to him and then gives him some medicine, a sponge bath, and explains the hospital routine; Bryce talks to his roommate; and Dr. Hotchkiss tells Bryce his preliminary diagnosis and explains that he will be seeing a specialist.

Chapter 8: The Shark in the Fish Tank. In which Dr. Courtland, the cystic fibrosis specialist, sees Bryce; Starlight eats Beverly's lunch; Willard thinks there is a shark in the fish tank; Starlight recommends Chinese herbal medicine for Bryce; and Nurse Wilson tells them that the seaweed dressing recommended by Starlight has the same active ingredient as the dressing that she is putting on Thelma's foot.

Chapter 9: The Specialist's Diagnosis. In which Beverly tries to talk to Valerie, Dr. Courtland calls, Valerie goes to Bryce's hospital, she and Bryce talk to Dr. Courtland, the specialist, and Dr. Courtland gives his diagnosis.

Chapter 10: Beverly's Big News. In which Beverly is still trying to talk to Valerie but she is busy discussing what Bryce should do, Willard almost falls out a window, Beverly becomes very frustrated, Starlight joins the conversation, and Beverly finally tells her big news. (Beverly announces that she is pregnant.)

Chapter 11: A phone call to Roz. In which Valerie can not sleep so she calls her friend and tells about the problems in her life: Thelma's foot, Willard's craziness, Bryce's CF, Vernon's heart attack, and her own Repetitive Strain Injury, and Beverly's pregnancy.

Chapter 12: Willard Makes Popcorn. In which Taro visits Bryce in the hospital and teaches him some Japanese, Nurse Mark Taylor tells Vernon about his new health regime, and Willard decides to make popcorn.

Chapter 13: After the Fire. In which the Fire Department puts out the fire, Starlight regrets the loss of his marijuana crop, Beverly goes to pre-natal class, Thelma considers what to do about Willard, and Nurse Taylor warns Thelma about the possible loss of the house.

Chapter 14: Health Care in Japan. In which Beverly does pre-natal exercises; Thelma visits Starlight; and Maria and Taro talk about hospitals in the US and Japan.

Chapter 15: Nurse Wilson Leaves for Africa. In which Nurse Wilson tells about herself and why she is returning to Africa; Starlight gives Beverly nutritional supplements; and Beverly and Vernon go for a walk; and Bryce is gone. (A new patient is in Bryce's bed and they are told by another patient that Bryce is dead.)

Chapter 16: Unhappy Endings. In which Vernon and Beverly find that Bryce is still alive and has gone in for surgery; the telephone disappears; Willard loses control and is hospitalized; and the heart and lungs are not given to Bryce.

Chapter 17: Starlight's Situation. In which we learn about how Bryce spent Christmas and what has happened to the others since the day of Bryce's aborted operation; there are guards in the hall; Starlight goes south; someone tries to break into

Starlight's house; Starlight visits Bryce and tells about his situation; and Starlight gives Bryce a new metaphor.

Chapter 18: Taro Returns. In which there is another snow storm; Maria tries to find out what Starlight has been giving Bryce; Maria and Bryce talk about dreams; Taro enters and joins the conversation; more about the reason for the guards; there is a black out on Maple Street; and Beverly has a back ache.

Chapter 19: Gunfire at UH. In which Starlight comes with light and heat; Beverly's water breaks; they start for the hospital in Kim Park Lee's truck; Maria and Taro are stranded in Bryce's room; Taro needs to go to the bathroom; and there is gunfire in the hallway. (Taro is shot in the head.)

Chapter 20: Nursing Matters. In which Taro goes to Emergency; Beverly has a baby; there is an emergency transplant operation; Maria learns more about treating patients as people; and the family decides that nursing matters. (A happy ending for everyone except Taro who dies, but his heart and lungs are used to save Bryce.)

Student Recommendations for ESP Curriculum Design

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Abstract

This short article reports the recommendations for ESP curriculums from a survey of 1,100 Japanese students studying English for the field of computer science and software/hardware engineering.

Introduction

When educators begin to plan ESP curriculums, they often consult books and journal articles to see what other scholars have written on the subject, they check publisher catalogues for useful textbooks, they visit programs and talk to teachers at other ESP sites, they interview specialists in the target vocation or profession, and they gather samples of spoken and written discourse for analysis. One activity ESP educators often overlook, however, is consultation with the learners who will and/or have benefited from the proposed ESP program, an important activity seldom forgotten in EFL but frequently forgotten in ESP. The intent of this brief paper is to provide some input to ESP educators useful to ESP curriculum design from the people who are affected most by the designers' decisions: students.

Research

The data for this research was collected between November 5th and December 11th of 1997 via a bilingual (English and Japanese) e-mail survey sent to over 1,100 students in the Department of Computer Software and the Department of Computer Hardware at the University of Aizu. Responses were collected from students and divided according to recommendations for inclusion in our ESP program and criticisms of features to avoid in our ESP program. A copy of the survey appears at the end of this paper in the Appendix.

Results

The results from student responses to the e-mail questionnaire have been organized and summarized below:

Features to Include in an ESP Program

- a 4-skills introductory/preparatory course during the 1st year
- course materials that encourage students to think deeply rather than merely memorize language rules, vocabulary, and miscellaneous facts
- course instruction that is immediately applicable to current studies and daily activities
- courses that balance language/knowledge input with training in language/knowledge output in the first year (i.e., writing, speaking, discussion, and pronunciation)

- many out-of-class opportunities for students to use English in natural settings (e.g., social activities with foreign students/faculty on weekends)
- division of students according to skill level (e.g., basic, regular, advanced)
- electives suited to the needs and interests of students at each skill level (e.g., vocabulary development for basic level students, discussion courses for advanced students)
- a 10-15 student limit for speaking or discussion classes
- broader ESP instruction the freshman year and progressively more discipline-specific ESP instruction in the sophomore, junior and senior year
- uniquely designed ESP courses by each professor and the option for students to select the professors, courses, and teaching styles they like the best (e.g., five different speaking courses with different content and instructional approaches offered by five different professors; students would be allowed to choose the course and professor that best fit their individual needs and interests. If few or no students enroll in a particular professor's courses, the professor should be replaced.)
- three 30-minute courses per week rather than one 90-minute course
- a certain amount of freedom to design or select one's own assignments
- English-only dormitories or other English-only territories (e.g., English classrooms, English professor's offices, and the hallways and lounges in between; specified tables in the university dining hall.)
- various exchange programs with universities abroad (differing in length, study focus, and cost) for students to select from
- self-paced courses that give students the freedom to study as much as they want and for as long as they want (e.g., one student might select to do 20 lessons in ten weeks while another chooses to do only 5 lessons in one year)
- the use of TOEFL scores to help determine student advancement (e.g., 400 to enter freshman courses, 450 to enter sophomore courses, 500 to enter junior courses, 550 to enter senior courses, and 600 to graduate)
- short, intensive ESP courses during spring or summer vacation
- more English writing assignments in all university courses
- the option to test out of courses if a student's ability is already quite high

Features to Avoid in an ESP Program

- course material and activities that demotivate students (e.g., material and activities that are irrelevant to student interests and needs, that appear to have no purpose other than keeping students busy)
- the use of a student's native language in an ESP course (e.g., Japanese) by students and professors, except for very special occasions
- artificial English conversation/speaking activities instead of genuine conversation and discussion
- lazy students
- mixing students of different language skills and levels of interest in the same class
- homework and exams that are too difficult or too easy
- course grades that are too harsh or too mild

- large enrollments for speaking or discussion courses
- course material that is not related to a student's current academic life or field of study
- professors with low academic or English language qualifications (e.g., computer science professors who can't write papers in English or who score less than 600 on the TOEFL test)
- professors who are too busy to chat with students
- too much time on drills and exercises rather than on authentic listening, speaking, reading, and writing activities
- decisions about ESP courses without input from students

Discussion

In the items summarized above, it is clear to see that students have many opinions about how to improve the ESP program (and the computer science program) at the University of Aizu. Some students want to see improvement in the curriculum, by suggesting how to improve course content and course teaching methods or by expanding opportunities for authentic use of English on or off campus. Other students want to see improvement in the character and qualifications of some of their classmates and some of their professors. They recommend that students be more diligent with their studies and that some of their professors be more diligent in self-improvement.

From these comments, we can observe that there are two approaches to creating a good university ESP program. One approach is to build a good curriculum, and the other approach is to build good character. I think both are necessary for a successful program. Excellent classes, excellent classmates, and excellent professors make a very nice environment for study.

Of course, most of the students who answered the questionnaire were very positive about the current University of Aizu ESP program and are very proud of their university. They think it is one of the best programs in the world. Generally, they said that they liked their courses and their professors very much. However, it is important to let all students tell their opinion. If some students have an idea or a complaint we should listen to them. I think this is very important. If a student feels that there is a problem with something, he or she may lose motivation for studying and damage the university atmosphere for other students. This is not good because many Japanese students are strongly affected by the surrounding environment and the attitudes of other students. If a few students begin to think negatively, many other students may begin to think negatively too. This is not good for our studies.

Strong students have many interests and don't mind the hardship of studying hard to reach their goals. Weak students don't have a clear goal, easily lose interest in their studies, and soon become negative about everything. Teachers can help both the strong students and the weak students by making a nice ESP curriculum and a positive environment for learning. With these two approaches the University of Aizu can make an even better ESP program and other universities can improve their ESP program by studying our program. I hope more universities in Japan and abroad will make successful ESP programs for their students.

Acknowledgment

I would like to thank Dr. Thomas Orr for his kind advice and assistance in conducting this research and writing this article.

Appendix

This letter was e-mailed to all University of Aizu graduate and undergraduate students in English and in Japanese. A copy of the English version appears below.

All Students:

Please answer the following questions before December 11 for our important research. Your answers will help us improve English education at the University of Aizu. Return your answers to t-orr@u-aizu.ac.jp and s1041157@u-aizu.ac.jp in Japanese or English.

Thank you.

Mr. Kin'ei Yoshida
Dr. Thomas Orr

……

The English curriculum at the University of Aizu is designed to prepare students for academic English (used in University of Aizu courses and projects) and for computer science English (used by computer scientists and engineers in their professional work). We would like to know your honest opinions about this English curriculum.

1. Based on your experience, what features of the University of Aizu English curriculum have been helpful for you?
2. Based on your experience, what features of the University of Aizu English curriculum have NOT been helpful for you?
3. What would you like to see added or changed in the University of Aizu English curriculum?

Preaching to Cannibals: A Look at Academic Writing in the Field of Engineering

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Abstract

In this paper, Swales' 1990 Create a Research Space (CARS) model for describing the "move" structure of research article introductions is evaluated in terms of how well it can be applied to 12 article introductions in the field of software engineering. Results indicate that although the model adequately describes the main framework of the corpus introductions, a number of important features are not accounted for, in particular, a summary of previous research, an evaluation of the present research, and definitions and examples. It is shown that these areas are essential for the audience of the journal articles to not only understand the content, but also apply the results to specific problems in their own research area.

Introduction

English has not always been the dominant language used in science and technology, but since the 1960's the number of journals which require papers to be submitted in English have grown immensely. For example, Swales (1987) estimates that approximately half of the millions of journal papers now published are in English, and as early as 1981 almost 80% of all engineering journal papers were published in English (Swales, 1981). For the majority of the science community, who are non-native speakers of English, this presents somewhat of a problem; in order to get research published in the most prestigious journals, their papers have to be written in a language they will not be completely familiar with. Realizing this clear need for a specific kind of English, many ELT teachers have begun investigating English used for specific purposes (ESP) and in particular, English for science and technology (EST).

Early studies in ESP and EST identified a number of areas that prove difficult for non-native speakers. Pearson (1983), in her summary of this work, discusses five of the more prominent of these in detail: 1) technical terminology, 2) common language words used technically, 3) strength of claim, 4) contextual paraphrase, and 5) rhetorical or text structures. The fifth category of "text structures" has perhaps generated the most amount of interest. Differing explanations as to why this causes difficulties have been offered by James (1984), Mohan et al. (1985) and Pearson (1983). The most widely accepted answer, however, is that supported by Carrell et al. (1983), Hinds (1983), Kaplan (1987), Connor (1996) and others. They argue that there are profound differences in the organization of texts between different cultures and indeed different disciplines within the same culture. A non-native speaker or even a native speaker who is unaware of the particular structure of a "foreign" text, therefore, will experience comprehension difficulties.

In view of this, there have been an increasing number of studies aimed at identifying the structural patterns used in scientific writing. For example, research article abstracts have been looked at by Weissberg et al. (1990), the introduction by Hutchins (1977), Hepworth (1978), Swales (1981), and Zappen (1983) among others, and the discussion section of MA theses by Dudley-Evans (1994). There is, however, one important question that has yet to be considered: to what extent can such generalizations be made about the "writing of science and engineering"? In other words, do the general models proposed above accurately account for the writing of a specific discipline?

Here, an attempt will be made to answer this question by assessing how well Swales' 1990 model for research article introductions, the Create a Research Space (CARS) model, can be applied in engineering (see Figure 1). It should be noted that this model has been through several revisions since its conception in 1981, incorporating the findings of Cooper (1985), who applied it in engineering, and Crookes (1986), who applied it in both the 'hard' and 'social' sciences. As such, the model can be considered to be one of the stronger descriptions of text structure to date, and its acceptance in the field is reflected in the number of textbooks which directly quote it, or whose accounts have been strongly influenced by it, e.g. Weissberg (1990), Huckin and Olsen (1991) and Swales and Feak (1994).

Figure 1: Swales' (1990) Create a Research Space (CARS) Model

Move 1: Establishing a territory

Step 1:	Claiming centrality
	and/or
Step 2:	Making topic generalization(s)
	and/or
Step 3:	Reviewing items of previous research

Declining rhetorical effort

Move 2: Establishing a niche

Step 1A	Counter claiming
	or
Step 1B	Indicating a gap
	or
Step 1C	Question raising
	or
Step 1D	Continuing a tradition

Weakening knowledge claims

Move 3: Occupying the niche

Step 1A	Outlining purpose
	or
Step 1B	Announcing present research
Step 2	Announcing principle findings
Step 3	Indicating RA structure

Increased explicitness

Research Design

- Corpus

In Swales' (1981) study, a corpus of 48 articles was chosen from 14 journals in the fields of physics, electronics, chemical engineering, bio-medicine, and social sciences, an average of 3.4 articles per journal. The field of engineering, however, is extremely wide, with the Institute of Electrical and Electronics Engineers (IEEE) alone having 37 sub-societies. Even within a single society such as the Computer Society of the IEEE, there are many sub-disciplines such as hardware, software, robotics and communications. It was decided, therefore, to test the suitability of the CARS model not in engineering as a whole, but in only a single sub-discipline of engineering, software engineering.

As only research articles in software engineering were to be looked at, a corpus of 12 full paper articles was chosen from one of the field's most important and influential journals, the Transactions on Software Engineering (TSE), published by the IEEE with a readership of over 11 thousand engineers. As mentioned earlier, many authors in engineering are non-native speakers, and although a prestigious journal such as the TSE will review and edit their work, the possibility of "errors" and "non-standard" English remains. Cooper (1985), for example, found that at least one article in her study contained enough errors to interfere with the meaning of the text. To reduce the potential problems of non-native speaker writing, the final corpus comprised of articles which had been awarded "Best Paper of 1996" awards by the journal. To qualify for such an award, the articles had to go through two rigorous review processes where errors in English would be checked by up to six reviewers and editors.

- Validating the Analysis

In order to establish the suitability or unsuitability of the CARS model, the analysis here also required validation. In Crookes' study (1986), this was achieved using five trained raters, although problems emerged because the group, who were graduate students of English rather than engineering, were unable to identify move boundaries signaled by topic change rather than explicit signals. To avoid this problem, here, 4 specialist informants were consulted at various stages in the analysis of the data, and 7 of the original authors of the corpus articles were contacted via e-mail after the initial analysis was complete. There are, however, potential problems with using specialist informants, and so the advice given by Swales (1990, p. 130) was adopted, i.e., only specialists in the same field were consulted, and used primarily for testing formulated hypotheses and findings. In addition to using specialist informants, the results were also compared with those of other studies directly relating to writing in engineering. The main source here was the IEEE publication *Transactions on Professional Communication* (TPC), an international journal dedicated to studies on the written and oral presentation of engineering research. Surprisingly, this wealth of information has been virtually if not completely ignored in all previous studies on text analysis coming from the field of ELT. Even Cooper (1985), who looked directly at engineering writing, has seemingly passed it by.

Results

- Clarification of Terminology in the CARS Model

In the first stage of analysis, the article introductions were analyzed according to the CARS model as presented in Swales' 1990 work. It became immediately apparent, however, that the terminology used by Swales needed clarification. For example, Swales (1990, p. 146) describes Step 1-2 (making topic generalizations) as being of two types; the first expresses "the current state of the art," what is known about the field or technique in general, while the second is a statement about "phenomena" in the field. He goes on, however, to say that statements about "current requirements for further progress" would also be included in this step. If this is so, there is clearly an overlap with the purpose of Step 2-1D (continuing a tradition) which can establish a niche by expressing the "needs/desires/interests" of the field (Swales, 1990, p. 156). Based only on these definitions, the sentences below, which were taken from the corpus, could be classified into either step.

"A software requirements specification should be a comprehensive statement of a software system's intended behavior."

"Before developers of certifiably safe software can take advantage of the concurrent and real-time constructs of Ada, rigorous analysis techniques to analyze their timing properties must be developed."

To clarify the difference between the two steps, it would seem necessary to also consider the location of the statement within the text. In this study, statements appearing prior to a review of previous research (Step 1-3) were classified as Step 1-2, while those appearing directly after the review were classified as Step 2-1D. Such an interpretation has also been supported by Swales himself (personal communication). Also, improvements or requirements suggested explicitly by the author, for example, directly after a Step 2-1B (indicating a gap) or signaled by an adversative sentence-connector, were classified as a Step 2-1D rather than a Step 1-2. Other problems were found in the classification of Move 3 steps. Step 3-1B (announcing present research), for example, is defined as a description of "the main features of the research" (Swales, 1990, p. 159). Distinguishing between "main features" of the research and the Step 3-2 option "announcing principle findings,", however, was particularly difficult. For example, Swales (1990, p. 160) classifies the sentence "In this paper we give preliminary results of...." as Step 3-1B not Step 3-2. Unfortunately, he gives no examples of statements that would fall into the latter step. It was decided, therefore, to classify only general statements about how or what was done in the present research into Step 3-1B, and specific statements about research method, descriptions of tools or techniques developed in the present research, and/or specific results into Step 3-2. For example, a statement such as "This paper presents a new architectural style." would be classified into Step 3-1B while a statement such as "Our technique consists of two algorithms." would be classified into Step 3-2. Step 3-3 (indicating RA structure) was also difficult to interpret. Swales (1990, p. 161) describes this step as including "in varying degrees of detail the structure - and occasionally the content - of the remainder of the RA." To detail the content of the research article, however, would naturally include details of results, thus merging with the purpose of Step 3-2. The classification of Move 3 steps is complicated further if Swales' 1994 account is considered. In this study, while the classification of Steps 3-1A, 3-1B and 3-2 are the same, two further possible steps are mentioned, i.e., a statement of secondary findings, and statements about the value of the research. The second of these is said to mention "anything about the contribution [the] research will make" (Swales et al., 1994, p. 192). This would again appear to merge with the purpose of Step 3-1B which can include statements about how the present research extends the findings of previous work. Interestingly, the description of Step 3-3 in the

1994 account has no mention of content in the remaining RA.

To deal with these problems, first, statements about secondary findings are included in Step 3-2, and a new "Evaluation of Research" step is created, which includes statements about the value of the research, and how it extends previous results. Finally, the step indicating RA structure appears as Step 3-4 and is defined according to Swales' 1994 description. The CARS model to be used here, re-named the "Modified CARS model," is presented in Figure 2. It should be noted, however, that apart from the additional evaluation step, the model is almost identical to the original CARS model. The only other change made is the addition of the "and" condition in Move 2 and Move 3 Step 1s, as it was anticipated that more than one type of step could be used at a particular place. The issue may be raised that presenting a modified version is unnecessary and that the evaluation step can be incorporated into Step 3-2. Indeed, this is possible but I hope the analyses here will show that in software engineering at least, it is beneficial to consider it as a separate step.

Figure 2: The Modified CARS Model for Article Introductions[3]

Move 1: Establishing a territory

Step 1: Claiming centrality
and/or
Step 2: Making topic generalization(s)
and/or
Step 3: Reviewing items of previous research

Move 2: Establishing a niche

Step 1A Counter claiming
and/or
Step 1B Indicating a gap
and/or
Step 1C Question raising
and/or
Step 1D Continuing a tradition

Move 3: Occupying the niche

Step 1A Outlining purpose
and/or
Step 1B Announcing present research
Step 2 Announcing principle findings
Step 3 *Evaluation of research*
Step 4 Indicating RA structure

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[3] NOTE: Italics indicate where changes to the original CARS model have been made.

Move Structure and Occurrence of Steps in the Modified CARS model

Based on the Modified CARS model above, the corpus article introductions were analyzed to identify the move and step structure. A summary of the move structure is given in Table 1, and the occurrence of steps is shown in Table 2.

Table 1: Move Structure in Article Introductions[4]

Intro.	Move Structure	Words	Sent.	Para.	Words/Sent.
1.1	1 2 1 2 1 2 1 3 1 2 3 1 2 1 2 1 2 1 2 3 1 3 2 3	1479	68	15	21.8
1.2	1 2 1 3 1 3	803	25	7	32.1
1.3	1 3 1 2 3	909	43	8	21.1
2.1	1 2 1 2 1 2 1 2 3 1 3	698	27	5	25.9
2.2	1 2 1 2 1 2 1 2 3	1190	57	10	20.9
2.3	3 1 2 1 2 1 2 1 2 1 3 2 1 3 1 3	1337	56	13	23.9
2.4	1 3 2 1 2 1 2 3	1067	42	7	25.4
3.1	1 2 1 2 1 2 1 2 3	1288	39	8	33.0
3.2	1 2 1 3 1 2 1 3 1 3 2 1 2 3	1340	59	8	22.7
3.3	1 2 1 3	642	23	6	27.9
3.4	1 2 1 2 1 2 3 1 2 1 3 1 3 1 2 3 1 3	914	43	5	21.3
3.5	1 2 1 3 1 3 1 3	591	23	5	25.7
Averages		**1022**	**42.1**	**8.1**	**25.1**

Table 2: Step Occurrence in Article Introductions[5]

Intro.	Move Classification													
Code	1.1	1.2	1.3	1	2.1A	2.1B	2.1C	2.1D	2	3.1A	3.1B	3.2	3.3	3.4	3
1.1	N	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
1.2	N	Y	Y	Y	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y
1.3	Y	N	Y	Y	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y
2.1	N	Y	Y	Y	N	Y	N	Y	Y	N	Y	Y	Y	Y	Y
2.2	Y	Y	Y	Y	N	Y	N	Y	Y	N	Y	Y	Y	Y	Y
2.3	Y	Y	Y	Y	N	Y	N	N	Y	N	Y	Y	Y	N	Y
2.4	N	Y	Y	Y	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y
3.1	N	Y	Y	Y	N	Y	N	Y	Y	N	Y	N	Y	N	Y
3.2	N	Y	Y	Y	N	Y	N	N	Y	N	Y	Y	Y	Y	Y
3.3	N	Y	Y	Y	N	N	N	Y	Y	N	Y	Y	Y	Y	Y
3.4	Y	Y	Y	Y	N	Y	N	Y	Y	N	Y	N	Y	Y	Y
3.5	Y	Y	Y	Y	N	Y	N	N	Y	Y	Y	N	Y	Y	Y
%	41.7	91.7	100	100	0	91.7	0	50.0	100	41.7	100	75.0	100	83.3	100

As can be seen from Tables 1 and 2, each introduction exhibits all the moves described in the Modified CARS model, supporting the general framework offered by Swales. The framework is also supported by research reported in the TPC and comments from the four specialist informants. From Table 2, however, we see that the occurrence of steps in the article introductions is less consistent with the proposed model. For example, although steps 1-3 (reviewing items of previous literature), 3-B (announcing present research), and 3-3 (evaluation of current research) are obligatory, steps 2-1A (counter claiming) and 2-1C (question raising) are redundant, and steps 1-1 (claiming centrality), 2-1D (continuing a tradition) and 3-1A (outlining purpose) occur in only half or less of the introductions. Swales (1981) comments that the occurrence of steps will be discipline dependent, stating that the hard sciences and engineering will show a preference for using Step 2-1B and Step 2-1D over Step 2-1A and Step 2-1C, which are more common in education, management and linguistics. Results here support this view, but suggest that variations in step occurrence among different disciplines may be greater than originally thought. They also suggest that even within a single discipline such as engineering, there may be considerable variations between its associated sub-disciplines. For example, Swales (1990) states that engineering articles will show few examples of Step 1-3, but results here clearly reject this view.

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[4] **NOTE**: Numbers in the second column refer to the order of moves in the introduction. The numbers in the four right columns refer to the total number of words, sentences, and paragraphs in the article introductions and the average number of words per sentence, respectively.

[5] **NOTE**: Y and N indicate that the move either occurred or did not occur in the article introduction.

Cyclicity, Length of Moves, and the "Preaching to Cannibals" Phenomena

Looking at Table 2, it can be seen that the introductions here show a large amount of cycling between different moves. For example, in introductions 2.1 and 2.2, there are four cycles of Move 1 and Move 2 steps before the purpose of the current research is finally stated, and in introduction 1.1, the longest in the corpus, the number of such cycles increases to twelve. This feature was predicted by Crookes (1986) to occur in longer introductions. Indeed, the introductions here are considerably longer than those in Swales' (1981) study (varying from 100 to 500 words), and even Cooper's (1985) study (varying from 154 to 1129 words, average 424 words), which were selected from equivalent engineering journals. This may suggest that articles in engineering are increasing in length, or again, that there may be significant differences depending on the particular discipline within engineering. Clearly, however, the results here in no way support Swales' (1990, p. 159) hypothesis that engineering papers will show "brevity and linearity," in fact, the precise opposite is found.

Comparing the length of individual moves and steps in the introductions, on the whole, Move 3 is the longest, followed by Move 1, and then Move 2. (See Table 3.) Looking at the table, we can see that in Move 1, a great deal of time is spent making generalizations about the field (Step 1-2) and summarizing previous research (Step 1-3). Cooper (1985, p. 46) explains that this is because article introductions in engineering contain large amounts of "unassumed knowledge." The Move 1, therefore, is to, "provide the reader with that knowledge necessary for him or her to comprehend the new information which will be given in the paper." (Cooper, 1985, p. 46)

Table 3: Length of Steps in Article Introductions[6]

	Length of Steps as Number of Words															
IC	1.1	1.2	1.3	**M1**	2.1A	2.1B	2.1C	2.1D	**M2**	3.1A	3.1B	3.2	3.3	3.4	**M3**	**Total**
1.1	0	234	468	702	0	216	0	68	284	49	109	121	103	111	493	1479
1.2	0	106	97	203	0	51	0	0	51	66	21	298	80	84	549	803
1.3	13	0	164	177	0	13	0	0	13	19	7	418	184	91	719	909
2.1	0	44	48	92	0	81	0	106	187	0	131	51	177	60	419	698
2.2	64	26	121	211	0	164	0	146	310	0	51	209	319	90	669	1190
2.3	52	106	252	410	0	231	0	0	231	0	71	469	156	0	696	1337
2.4	0	245	233	478	0	187	0	0	187	36	33	71	113	149	402	1067
3.1	0	345	478	823	0	138	0	114	252	0	41	0	172	0	213	1288
3.2	0	176	308	484	0	420	0	0	420	0	49	72	71	244	436	1340
3.3	0	70	159	229	0	0	0	20	20	0	25	111	52	205	393	642
3.4	12	40	379	431	0	128	0	17	145	0	63	0	185	90	338	914
3.5	21	19	169	209	0	72	0	0	72	54	61	0	90	105	310	591
AV	14	98	201	312	0	124	0	34	157	15	46	143	133	93	429	1022
M %	4.3	31.4	64.3	100	0.0	78.7	0.0	21.3	100	3.4	10.8	33.0	31.1	21.7	100	
T %	1.3	11.5	23.5	36.3	0.0	13.9	0.0	3.8	17.7	1.8	5.4	14.8	13.9	10.0	46.0	100.0

One reason she gives for this, is that people working in engineering often change from one specialist field to another. Although the specialist informants interviewed for this study were unable to confirm this statement, they did agree that many readers of engineering

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[6] **NOTE**: IC = Introduction Code Number; AV = Average; M % = Percent of Move; T % = Percent of Total; and M1, M2, and M3 refer to the total number of words in that particular move.

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articles might be unfamiliar with much of the terminology and background information necessary to understand the research. One of the main reasons for this is because engineers will often subscribe to a number of different journals not just in their own narrow areas, in order to acquire results which can be used to help solve their particular problems. For example, one of the specialist informants describes the audience of engineering articles as, "... doing research in an area that's either your same area or an area where they can use your results or build on them for their own purposes."

The audience for the TSE, therefore, will be particularly large as most engineers will be doing research in some way related to software. This profoundly affects the writing of articles which are published in it. For example, when the specialist informants were asked to describe their own writing, the following comments were made:

"I try to explain things in a simple way so that just anyone who has a bachelors degree can almost get some idea of what I'm trying to do in the paper."

"When you write a journal paper you have to be very careful that even a naive person, that means who is not very familiar about the field, will be able to read that journal paper, and understand what [you're] trying to say."

"I kind of regard [article writing] as a kind of 'preaching to the cannibals.' "

Clearly, this "preaching to the cannibals" phenomena is an important consideration for the software engineer when writing research articles. We see this in the way the author gives background information in the form of topic generalization and summaries of previous research piece by piece, commenting on its problems or gaps, and relating it to the purpose of the present research. This explains the extensive use of Move 1 - Move 2 cycles, and even cycles involving a Move 3, where the research is first presented in very general terms, but then as the introduction progresses, more specific statements are made. One more technique used by the author is to define important terms, and provide examples to illustrate difficult concepts in the introduction. These are mostly found in Move 1 steps, although two of the introductions include long examples to clarify a problem (in Intro. 3.2) and the approach being used (in Intro. 1.3). For example,

"...internally complete, i.e., closed with respect to statements ...."

"By module, we mean a single procedure...."

"For example, the software for establishing and tearing down telephone calls must...."

"...scheduling algorithms/techniques (e.g., rate monotonic scheduling)...."

Note, definitions and examples were included when calculating the length of their associated steps. This may bias the results for a particular step, but it was felt that many of the definitions and examples found, were providing additional information about the related topic or problem.

Evaluating the present research (Step 3-3)

Swales (1990) chose the labeling of the moves in the original CARS model to reflect the nature of introductions, that of "persuading" the reader to accept the research being presented. As mentioned above, in the introductions here the persuasion is achieved to some extent by cycling between statements which establish the field (Move 1) and those which indicate a gap of extension of findings in the field (Move 2). Results here, however, showed that one of the major sections of the introductions where an “appeal” to the audience is made is in Step 3-3, (evaluation of research), a possibility only hinted at by Swales (1994) when describing the original CARS model.

From Table 2, it can be seen that Step 3-3 appears in all the article introductions in the corpus, justifying the creation of a new step in the Modified CARS model. It is also one of the longest steps in Move 3, accounting for almost one third of the move and 14% of the introduction as a whole.

In this step, the present research is evaluated, almost always positively, with respect to either or both of the following criteria: 1) the applicability of the research and 2) the novelty of the research. The first criterion is central in engineering, which is primarily concerned with solving specific problems. As one of the specialist informants describes,

“Computer scientists want to know did you build it, does it work, how long, how fast is it, because they want to use it... they want to see some proof of concept.”

Thus, we see its appearance in all but one of the corpus introductions, accounting for 58% of Step 3-3 as a whole. The second option, although less popular, appears in seven of the introductions, and accounts for 24% of Step 3-3 as a whole. One further possibility, accounting for the remaining instances of Step 3-3, is for the author is discuss the ’limitations’ of the research. Although this is rare in the corpus, we do find three instances. Interestingly, these are always followed by a contrastive statement signaling a more positive aspect of the research. A summary of the results can be seen in Table 4 below.

Table 4: Occurrence of *Application* and *Novelty* Step 3-3 Types

Introduction	Occurances of Step 3-3 Types by Number of Words			
Code	Application	Novelty	Limitations	Total
1.1	65	38	0	103
1.2	53	27	0	80
1.3	154	0	30	184
2.1	177	0	0	177
2.2	23	99	197	319
2.3	152	4	0	156
2.4	54	59	0	113
3.1	172	0	0	172
3.2	0	71	0	71
3.3	52	0	0	52
3.4	24	79	82	185
3.5	55	35	0	90
Total	**926**	**377**	**309**	**1702**
Average	**81.8**	**34.3**	**25.8**	**141.8**
%	**57.6**	**24.2**	**18.2**	**100.0**

Conclusion

This paper opened with the question: how well does the CARS model accurately account for the writing of introductions in software engineering. From the results above, we can see that in terms of describing the overall framework, the model is very successful; only the classification of definitions and examples into an appropriate step was missing. Problems with the model emerge, however, when a more detailed description of software engineering introductions is needed. The model is first hampered by weak definitions of individual steps, and because it is designed for a wide variety of disciplines, many steps are redundant or only rarely used, namely steps 1-1, 2-1A, 2-1C, 2-1D and 3-1A. A more serious problem is the absence of an "evaluation of research" step in the original model, which is shown here to be not only obligatory, but a crucial element in the introduction, and Swales' suggestion that engineering article introductions do not include a summary of previous research, are brief, and linear.

Ultimately, the CARS model is intended to be used as a pedagogic tool in the classroom. If the limitations of the model are understood, then I feel that it can be used effectively. The danger, of course, is that many teachers of technical writing, coming from backgrounds unrelated to the discipline in which they teach, will be unable to correctly interpret the model and inevitably use it "as is." This is common in Japan, for example, where teachers with an English literature background are asked to teach technical writing courses to scientists and engineers. A related problem is how both teachers and students will deal with texts that do not fit the prescribed model. In current textbooks that use the CARS model, there is rarely an opportunity to deal with these "problem" cases, so if at some point they are encountered they are likely to be treated simple as "exceptions" to the rule. Of course, the many exceptions to the rule may in fact be standard practice in a certain field. Research articles in English, for example, rarely if ever exhibit the Step 3-3 of the CARS model, giving a summary of the rest of the paper. To suggest the CARS model is the norm to students of this discipline is clearly presenting a misleading picture. In order to effectively use the currently available general models like the CARS model, and indeed create new and more accurate descriptions of writing in science and engineering, far more research must be directed towards the writing of specific disciplines. It is hoped that the study here offers one step in this direction. In the words of Taylor et al. (1991, p. 332),

> "[A] great deal more attention needs to be paid to the rhetoric of individual disciplines. Generalizing about 'scientific writing' (much less 'academic writing') is plainly insufficient."

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Simulation and Collaborative Learning in Political Science and Sociology Classrooms

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Introducation

Collaborative, content-based, computer writing projects can prove highly motivating for students. They can also enhance genuine and effective cooperation and interaction between students, between students and teachers, and even, via the Internet, between students and others around the world. Simultaneously, such projects provide a concrete, focused means of allowing students to gain and reinforce knowledge of a content subject, hone critical thinking skills, and develop writing, editing, and computer skills. Students develop new and authentic ways of interacting with information as they read and react to texts and then assimilate their structure, style, and rhetorical modes in creating new texts of their own to communicate what they have learned.

The Context

In the project described below, Japanese students at an intermediate level of English proficiency were enrolled in either a first year political science/environmental issues or a sociology/environmental issues course being co-taught at an international college by English-speaking professors and ESL instructors. Approximately three hours a week was devoted to instruction in the content subject, and three hours per week was devoted to the development of English skills (primarily in the computer lab) with all instruction being based around activities designed to help students master and reinforce their knowledge of the discipline being studied.

Since students with a proficiency in English far below that normally required for college courses had been allowed to enroll, the instructors grappled with how to make the content accessible as well as how to narrow the focus of the course to those concepts truly essential for an understanding of the key concepts while simultaneously helping students to build their vocabulary and develop reading and writing skills. This project attempted to meet these needs.

Rationale for a Joint Project

The content of the two courses overlapped a great deal. The sociology professor continually emphasized how environmental problems affected various segments of society and vice versa. Whereas in a case of, say, water pollution, a chemist would be interested in the specific toxins, a biologist in which plants and animals had died, and a doctor in the effects of mercury poisoning on the human body, the sociology professor had a broader goal. He wanted students to understand not only these basic cause/effect relationships but also how environmental damage affected people's lives (for example, their ability to earn an income or their standing within the community). Conversely, he also focused on the effects of society on the environment (for example, how social structures and values of a particular group - say those of post-WWII Japanese bureaucrats and corporate executives- might allow prolonged damage to the environment unfettered by legislative restraint). Such concerns naturally overlapped with the issues in political science where the professor focused on how environmentalists were trying to influence both legislators and those who elect them (the public at large) in the formulation of public policy. Both professors mentioned the work of interest groups and had linked numerous homesites to their own homepages (see Resources) for students to utilize in doing research about environmental problems. Many of these sites were those of environmental interest groups, and as the ESL teachers guided the students in analyzing these sites, it became clear that they contained various distinctive types of writing which could serve as effective models for the students to use in communicating their own ideas in writing. This analysis, then, became the basis of the final writing project: a newsletter or web site produced by the students themselves containing the same types of writing they were encountering on the Internet.

This kind of writing class varied from the traditional approach to writing. The focus was not on the essay, but rather on collaborative writing and the production of new types of text which reflect the tasks inherent in the study of the specific disciplines. This approach engaged the students' interests, fostered interactive learning, and motivated them to use English for communicative purposes. The project met the students specific needs to learn more in-depth about the issues they were concerned about in their studies.

Writing Tasks

Initially, pre-writing activities, such as ranking environmental problems, helped students to identify one environmental problem in which they were most interested, and six groupings of students emerged: those interested in water pollution, air pollution, nuclear issues, forest issues, population issues, and the effects of dams. Each group then simulated the forming of an interest group (with a name, mission statement and logo) which would do research and provide information to the public about its issue. Students were required to provide information describing and explaining the causes of the issue in some of the authentic forms they had seen modeled on the Internet (news briefs, press releases, short reports, statistics/fact sheets, Q and A sheets, timelines, charts, or book reviews). Students also had to include information about the results of the problem (such as case studies, personal accounts, and interviews with or reports about victims), information about public opinion/reaction to the problem (editorials, interviews with environmentalists/activists, poll results or indictments), and information regarding political action being taken (reports on legislation under consideration, interviews with politicians, descriptions of agencies/organizations and their actions, action alerts, letter campaigns, petitions, or reports about grassroots movements, protests, demonstrations, and lawsuits). Students were urged to be as creative as possible and include visuals and graphics aids.

The writing tasks served the purpose of integrating the learning of computer and language skills. After learning to create documents in Microsoft Word and to send e-mail, the students developed reading and communication skills and computer-based research skills as they gathered and shared information from Internet resources. Communication skills were also enhanced as they conducted polls and interviews (on campus and by e-mail) to get additional information for their newsletters. As they composed their documents, they developed writing skills such as summarizing, paraphrasing, reporting, and editing.

Effects on Students

The project served as a natural means for collaborative work. Students developed negotiation skills as they worked together, gathering and analyzing material to further their understanding of how issues are interrelated in the two disciplines and making decisions about what to include in their newsletters and how to organize this material. In doing so, they became aware of the importance of working collaboratively to explore the significance of interrelated aspects and to achieve their publishing goal.

In addition, with each group focusing on only one issue each, the writing project was narrowed to a manageable task, but, in the end, multiple interconnections became apparent: that overpopulation might lead to a desire for dams or that these dams might displace yet another indigenous population or endanger species residing in a forest that would be flooded.

Another interesting phenomenon was that intially students quite honestly expressed apathy about the concerns of people experiencing problems in other places. However, before the completion of the project, there was at least partial recognition of the fact that they and others around the world shared some common concerns as, for example, when a student wrote a letter to President Ramos in the Philippines expressing concern over mercury poisoning of water similar to that in Minamata, Japan.

The development of computer writing and information-gathering skills also led to a different teacher-student relationship. Students demonstrated a strong sense of responsibility for their own learning, viewing the instructors more as consultants rather than the source of all learning. They conferenced extensively with instructors via e-mail to help clarify and organize their ideas. This provided a non-threatening way to receive on-going, timely feedback.

The option of producing a website especially enhanced students' awareness of a real audience and stimulated involvement in the simulation. One group of students, for example, decided to form an interest group focusing on environmental problems related to dams. They then posted their environmental interest newsletter on an Internet homepage, calling attention to the social problems caused by the building of dams, urging international political action to address the problems, and soliciting new members from around the world for their interest group.

Conclusion

In conclusion, then, many benefits for students seemed to emerge from the project: engagement with an authentic, real-world context (the web); a genuine, authentic context for interacting, collaborating and negotiating within a group, a sense of responsibility for their own learning, a sense of teachers as consultants rather than the ultimate source of knowledge, the ability to acquire knowledge of abstract environmental issues concepts and the multiple connections between various environmental issues, an opportunity to develop computer skills in word processing (including graphs and charts), graphics design, e-mail use, and web page creation, awareness of and an ability to produce types of texts other than the traditional essay, the development of general writing skills transferable to many contexts – summarizing, paraphrasing, etc., heightened motivation, and a sense of accomplishment in producing a professional-looking document.

Resources

N. J. Vasantkumar's homepage (sociology professor):

http://www.susqu.edu/FacStaff/v/nvasantk/

Note: Click on "Environment" in the upper right-hand corner of the table.

Dana Ward's homepage (political science professor):

http://www.pitzer.edu/d̃ward/Homepage.html

Note: Click on "cybersurf." Then choose "Environment." "Electronic Books and Journals" also has useful general resources such as CNN Interactive, which has a regularly updated "Earth" section with current environmental news.

A Sociolinguistic Analysis of Doctor-Patient Communication

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Abstract

This paper is about communication in the health care setting, especially between doctors and patients, and offers a sociolinguistic perspective on this type of interaction with a focus on factors influencing the speech options of the interlocutors. The primary purpose is to contribute some viewpoints as to why doctors' and patients' speech is not more similar. The paper will consider turn-taking, interaction formats, question structures, language and group membership and code switching. The analysis of the sociolinguistic dynamics of doctor-patient communication views patients' communication as largely restricted by "linguistic" type factors and doctors' language choices as more influenced by "social" type factors. Factors such as turn-taking and conversation formats, which are viewed as central "sociolinguistic" factors, are a primary focus.

Introduction

Health care is a situation of important consequence, the success of which is greatly influenced by the information exchange. There are many information gathering procedures used by medical personnel to request detailed personal health and lifestyle information from patients. These procedures can facilitate communication and many encounters go smoothly and efficiently; however, this is not always the case. Though increased awareness of communication effects and communication skill training for health care providers and the general public may be easing some of the difficulties, it isn't always easy for doctors and patients to communicate effectively. Patients often leave medical appointments feeling unsatisfied, and health care providers feel frustrated with patients who seem to never understand their treatments and consequently return to the clinic over and over again with the same problem.

Two frequently asked questions summarize the difficulties often occurring in health care communication:

1. Why don't patients assert themselves more effectively when talking with doctors?
2. Why don't doctors talk more like normal people? (i.e., Why don't doctors talk more like patients?)

This paper proposes a sociolinguistic analysis directed towards answering these two questions by highlighting some of the elements from sociolinguistic research on health care communication compared with more general communication. Terminology and register, verbal interaction formats, turn-taking, the structure and timing of questions, solidarity and status, language and group membership and code switching will be considered. Though the overall perspective is sociolinguistic, and all elements take on a sociolinguistic character within the interaction, most elements can also be defined as more "linguistic" or more "social" (see Figure 1). It is anticipated that the answer to the first question will be more heavily weighted by "linguistic type sociolinguistic" factors and the answer to the second more heavily weighted by "social type sociolinguistic" factors.

The difficulties patients may encounter in trying to assert themselves will be addressed first.

Terminology and Register

Perhaps the most easily identifiable element that may cause communication difficulties in doctor patient communication is medical terminology. Typical patients are not fluent in using scientific terms for body parts and functions or scientific descriptions of treatments and medications, so they cannot easily join in the conversation if the health care provider is using such vocabulary and the academic register that often accompanies that terminology. Vocabulary and grammatical patterns used for technical explanations are "linguistic" type elements.

Structure and Timing of Doctors' Questions

West (1983) observes the structure of questions asked by doctors that restrict patients' responses. Doctors often structure questions in such a way as to ask patients several questions but allow space for only one answer. Example: Any headache, fever or chills? Any pain, tenderness, discomfort? Another type of question structure is the "Is it X or is it Y?" This structure could be viewed as two questions, each requiring a yes or no answer or as a question which predetermines the answer to one of the mutually exclusive choices. Additionally, doctors sometimes begin asking new questions during the patient's answer to the previous question(s).

The structure of questions has a significantly linguistic character; however, the timing of the questions in the conversation is also important as observed by West (1983). West points out that the importance of patient's (i.e., the interviewee's) answers are decreased and structurally usurped in the verbal exchange by doctor's talking over patients' answers. All of the points noted above decrease the importance of the patients' responses since both of the question structures limit the categories of responses possible. However, an important effect of a doctor's overlapping new questions during a patient's answer is that transition points in the conversation where the patient might gain a turn, and become able to contribute to the information exchange, are also usurped; the doctor maintains her/his turn in spite of having cued the patient to speak.

West (1983) also found that, in her data, doctors answered only 87% of questions asked by patients, whereas, patients answered 98% of questions asked by doctors. When patients didn't answer, it seemed related to the structure of the doctors' questions. When patients asked questions, doctors often responded with more questions.

The timing of doctors' questions is an element with more social character. In normal conversation, though some overlap of speakers may occur, beginning a new question or topic while the interlocutor is speaking is often considered an interruption and a sign of rudeness.

Turn-Taking

Doctor-patient communication frequently includes an interview of the patient by the doctor. An interview does not have the same format or interaction signals as normal conversation. Generally patients are not skilled at being an interviewee, whereas they are skilled at normal conversation, and may be expecting normal conversation skills to be functional in the doctor-patient encounter. For this reason, it is of interest to review some aspects of the structure of "normal" conversation.

For background reference, the description of turn-taking done by Sachs, Schegloff and Jefferson (cited in Fasold, 1990) is of interest. The main points are the following.

There is, for the most part, "no gap" or silence between speakers and "no overlap" of interlocutors' speech. Alternation of speakers occurs through turn taking. A silent interlocutor can gain a turn to speak in the following ways:

1. The current speaker selects another interlocutor to take the floor, often by asking a question.
2. Self-selection of a new speaker at a transition relevance place in the interaction.
3. The current speaker pausing, thereby creating a silence and transition point, no new speaker begins to talk, the current speaker continues.

For a two person conversation, the number of turns per speaker is approximately 50%. A speaker may speak briefly or at length. Questions may be initiated by either speaker. Topics may be introduced by either speaker.

Turn-taking is a necessary mechanism for the exchange of spoken language between interlocutors. It is part of the total language system which is necessary for spoken structures an meaning to be understood. Because it allows for this exchange between participants it also has a social character which partially structures their relationship during the information exchange. This paper considers turn-taking to be a central sociolinguistic element.

Interaction Formats

The above is for normal conversation. Doctor-patient communication frequently, if not usually, follows an interview format with the doctor asking the questions and the patient mainly supplying answers. The interaction procedures and signals are not the same as those existing in normal conversation. Shuy's (1983) work explains that most people have normal conversation skills (as described above), and they are not prepared for the interaction format of an interview, either as an interviewer or as interviewee. Doctors, like other interviewers, are prepared ahead of time and know many of the questions they will ask. People who know they are going to be interviewed anticipate questions and prepare answers; however, people going to see their doctor to receive medical care, a service, are not necessarily consciously expecting to be interviewed.

Research concerning dentist-patient communication done by Candlin, Coleman and Burton (1983) offers support for Shuy's (1983) work. Candlin et al. talk about the "discoursal set" of dentist-patient communication and the "discoursal set" of normal conversation pointing out that patients, for the most part, do not have specialized experience in using the discoursal set of the dentist-patient encounter. Consequently, patients may perceive the dentists' interactional cues to be the same as the signals they are familiar with in normal conversation and try to react to these cues accordingly.

In a normal conversation, when one interlocutor asks another a question, the floor is yielded allowing the new speaker to speak at length, including the options to ask questions or to introduce new topics. In an interview, the interviewee does not have unlimited time to answer questions, and is not expected to ask the interviewer questions. In health care contexts, the patient is asked many questions, but is certainly not given the floor to answer at length; concise answers are expected, and those answers may even be interrupted by additional questions (see West 1983).

In normal conversation, the speaking turn distribution is approximately equal between two interlocutors. Candlin et al. (1983) observed that in dentist-patient discourse, the discoursal set provides more turns for dentists than for patients. From some of their transcripts, we can see that patients do talk and can offer information, but the information may be ignored if it does not comply with the format of the dentist-patient discoursal set. In order to comply with this format, Candlin et al. observed that patients had to wait for a "cue" from the dentist in order for their information to be acknowledged as actually heard and admitted into the conversation.

So, although patients may sometimes attempt to assert themselves by using normal conversation strategies, which allow either interlocutor to introduce topics, the structure of the discoursal set does not require the health care provider to admit the patient's information into the exchange unless a cue is given. The interview format clearly gives topic control to the interviewer.

These formats, which include special details for turn-taking, are also central sociolinguistic factors affecting doctor-patient communication. The normal conversational turn-taking system is not operational for the patient (who may be attempting to use those interaction rules), and the operating rules of the interview (Shuy, 1983) and the doctor-patient discoursal set (Candlin et al., 1983) favor the health care provider as the dominant interlocutor.

The medical interview differs from many other interviews, however, in that in many interviews, it is the interviewee who is the star of the interview. The star also often receives the most time to talk and elaborate on their ideas. The view point of the interviewee is the focus of interest. The health care interview does not allocate this position of stardom to the patient.

The doctor-patient interaction has been described as an interview, but it seems to be more of a questionnaire – a specific type of interview, often done by the interviewer reading a series of questions – asking for very condensed short answers, yes or no or multiple choice responses. The questionnaire analogy is probably accurate. At least part of the medical history exists on a pre-prepared written form from which the health care provider may be reading and on which the health care provider may be recording the patient's responses. The information needed to fill in such forms is well known, so it is not surprizing that the patient interview takes on some characteristics of the health care provider reading a questionnaire – for the hundredth time.

In effect, the health care provider is rehearsed in this type of communication situation – and even has a written script consisting of pre-prepared health care forms – whereas the patient can only ad lib. Who is rehearsed and who is not, is an additional social type element; here again, the patient is less prepared than the health care provider and less able to seize the floor in order to speak.

Summarizing the discourse structures which work against patients' ability to verbally assert themselves, we can list the following:

- Medical terminology and academic register.
- Doctor's Questions:
  Multiple questions asked in continuation during the doctor's turn to speak.
  "X or Y" or multiple choice type questions.
- Interview format.
- Cues for patient to speak are controlled by doctor.
- Overlap of doctors' questions during patient speaking turns.
- Doctor is "rehearsed" as the interviewer; patient is not prepared as the interviewee.

All of these factors result in a very uneven turn distribution with very few pauses or transition points to allow self-selection of speakers.

Of course, there are additional social and socio-economic factors which contribute to patient non-assertion, but the linguistic and sociolinguistic factors mentioned above are more than enough to decrease patient's possibilities for verbal self-assertion.

Language and Group Membership

Turning to the question as to why doctors don't talk more like patients, the concept of language as an indicator of group membership will offer some insight into the effect of the more "social" type of sociolinguistic elements affecting language choices in interactions. The concept of solidarity and status is also influential.

Speaking more "like patients" means approaching the use of normal conversation format and normal conversation turn taking patterns, i.e., the conversation format for which patients do have skills and experience. Consequently, patients would have more strategies to assert themselves as interlocutors if doctors used normal conversation formats, and patients could gain interactional status if the discourse format used in doctor-patient communication were more suited to their skills. Following from this, it could also be supposed that patients might be able to offer more information, participate more fully and take more responsibility for their health care.

An individual's choice of vocabulary, register, style, dialect or other language, not only accomplishes communication but also serves as a way of identifying group membership of the speaker and the relationship between the speaker and listener. "Speaking the same language" is one way to establish rapport with an interlocutor, but "speaking the same language" also, in a way, classifies the two participants as members of the same group. If doctors did indeed choose to speak more like patients, such choice of language might very well signal to the patient the doctor's desire for solidarity. The interpretation that the doctor wishes solidarity with the patient could imply giving up the power and status that the doctor has relative to the patient. Though communication might be facilitated, there could also be concerns about the status of the doctor. The doctor's authority as the expert is also supported by the fact that doctor's do not talk like patients.

When we want status, we often sacrifice solidarity – at least momentarily, and when we want solidarity, we sacrifice status, meaning we give up association with power concerning our relationship with our interlocutor. (For background on solidarity and status, see Brown & Gilman cited in Fasold, 1990.)

When doctors speak like doctors, they are maintaining their solidarity with other doctors and the tradition of medicine – which is intertwined with traditions of higher education associated with higher socio-economic power and status. When doctors speak like doctors, they mark themselves as members of the group "doctors." In addition to marking the group membership, "doctor talk" also marks doctors as non-members of the lower educated, lower socio-economic status group to which many patients belong. In effect, it may be precarious for a doctor's professional and social identity to "talk like a patient."

Herman (cited in Fasold, 1984) elaborates on the problem of language suggesting that bilingual speakers may find themselves in more than one psychological situation simultaneously. In a particular interaction, the language which a speaker chooses will be influenced by the speaker's language preference and the language which the interlocutor or the social setting may expect. Additionally, the speaker's choice may be influenced by "background" groups from the "wider social milieu" (Fasold, 1984, p. 187). A speaker may wish to be identified as a member, or as a non-member, of a group which is not necessarily present in the immediate communication situation. Though doctor-patient communication, as discussed here, does not involve different languages in the traditional sense, registers and styles can be considered types of codes or language variants which can be chosen by the speaker. In this sense, Herman's concepts can be applied, and may help explain the idea that doctors maintain their membership in that group, even though other doctors are not necessarily present, through maintaining jargon and academic register and/or maintaining the formats which do not use normal conversation cues.

Code Switching

Doctors, in addition to their profession, have a personal life and have themselves been patients (of other doctors) at some point in their lives. However, most patients have never been doctors. Any possibility of change or intervention in the structure of doctor-patient communication also lies in the hands of the doctors who know how to be patients as well as how to be doctors.

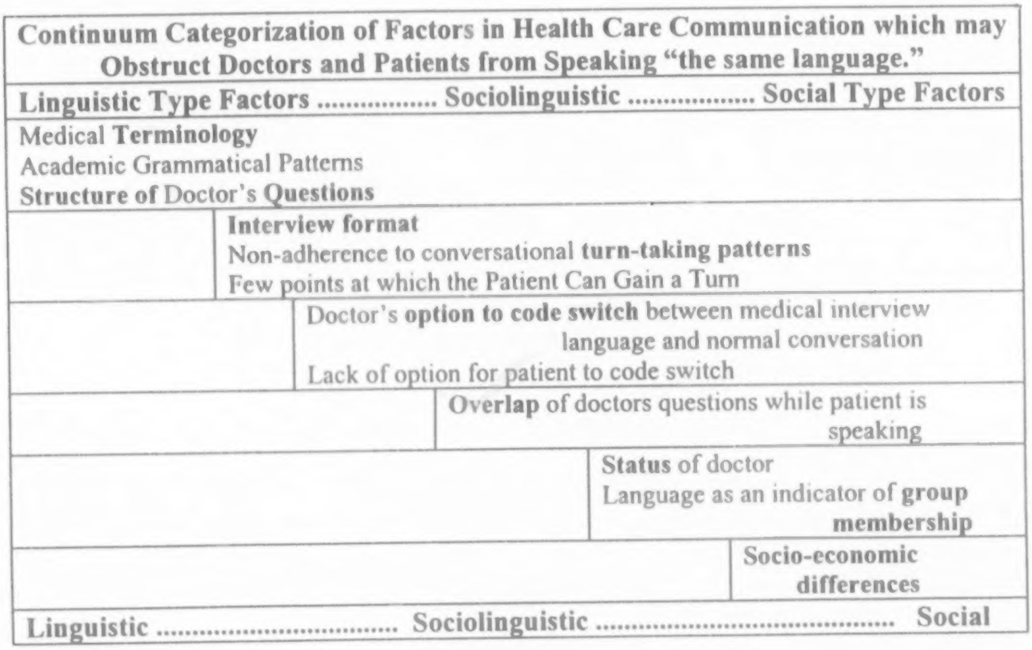
Code switching (for a discussion of code switching and social relations, see Scotton, 1988) between "doctor talk" and "patient talk" is a possibility for the doctor but not for the patient. As there may be other medical/technical personnel or patient's family members present in the medical encounter, the doctor may be alternating between medical terminology and more common terminology depending on to whom she/he is speaking (see Tannen Wallat 1983).

Though many health care personnel do switch between medical jargon and more general terminology, and also between "academic register" and more general register, when talking with patients, health care professionals do not necessarily switch between interview format and normal conversation format. If the turn-taking format does not approach that of normal conversation, the doctor may never be speaking the patient's "language," and the overall interaction may never be completely within the patient's "code," even though lexicon and sentence patterns may be modified.

Mishler (1984) describes medical care communication from another point of view. He uses the concept of voices: the "voice of medicine" and the "voice of the life world." In his analysis, both the doctor and the patient can use both voices. Though this seems clearly a type of code switching, it involves a kind of topic element as well as structures. Following through with the necessary medical procedures and protocols is important to both doctors and patients, so they both interact using the voice of medicine to accomplish these details. The voice of the life world is used to signal aspects of the situation that have more personal meaning for the patient. In his analysis of recorded medical interviews, Mishler observes that some doctors attend to the voice of the life world and switch into that voice or that code. He also observes that some doctors do not attend to the voice of the life world.

Though Mishler (1984) does not directly discuss sociolinguistics, his concept of "voice" is very parallel to a type of register or style which this paper has referred to as "code." When using this voice the focus is on an aspect of health or health care that is relevant to that particular patient's life situation. This does not necessarily involve collecting information, but rather acknowledgment of particular lifestyle details that are of importance to that patient. The interactions for these topics seem much more like normal conversation. So, in a sense, the topic seems to indicate the appropriate voice or code. Likewise, the language being used indicates what kind of topic, technical or personal, is being attended to. Doctors who are able to use both voices are able to code switch. From this perspective, patients also have the possibility to code switch in that they can comply with the interview format of the voice of medicine or the more normal format of the voice of the life world when it is in effect. For the most part, however, it is still up to the doctor to initiate a life world topic or to acknowledge and address the life world topics that the patient introduces.

In attempting to understand why doctors often do not speak more like patients, the association of language with group membership is a key factor.



Continuum Categorization of Factors in Health Care Communication which may Obstruct Doctors and Patients from Speaking "the same language."

Linguistic Type Factors .... Sociolinguistic .... Social Type Factors

Medical **Terminology**
Academic Grammatical Patterns
Structure of Doctor's **Questions**

Interview format
Non-adherence to conversational **turn-taking patterns**
Few points at which the Patient Can Gain a Turn

Doctor's **option to code switch** between medical interview language and normal conversation
Lack of option for patient to code switch

Overlap of doctors questions while patient is speaking

Status of doctor
Language as an indicator of **group membership**

Socio-economic differences

Linguistic .... Sociolinguistic .... Social

Figure 1

Figure 1 suggests a categorization of the elements considered in this analysis on a continuum from linguistic to sociolinguistic to social. In the communication setting of the doctor-patient interaction, all elements contribute to the sociolinguistic dynamics, and subsequently have a sociolinguistic character. However, in considering each element individually and which interlocutor is affected most, patients seem to be restricted by the more linguistic type elements, and doctors' language choice may be influenced by the more social type elements. Central sociolinguistic elements, such as turn-taking, seem to favor the physician.

Summary and Conclusion

This analysis of doctor-patient communication has offered one explanation of why doctors and patients do not speak more alike. The approach has applied sociolinguistic concepts, and has attempted to categorize these factors on a continuum as being more linguistic or more social. The types of factors which limit patients' ability to assert themselves are found towards the linguistic end of the continuum. These include medical vocabulary, technical grammatical patterns, and the structure of doctors' questions. The factors which influence doctors' language choice are related to language as an indicator of group membership and the subsequent social implications of choosing to speak more like a patient or more like a doctor.

The turn-taking patterns found in normal conversation as compared to turn-taking in doctor-patient communication is considered to be a central sociolinguistic element. Doctor-patient communication often follows a format which restricts patients' possibilities for gaining a turn, and also imposes additional restrictions on patients' ability to speak through the structure and timing of doctors' questions.

A closer look at formats and turn-taking mechanisms has also indicated the importance of considering the interactional formats and turn-taking rules in codes and in code switching. It is not only terminology and grammatical styles that influence information exchange but also the interaction rules and the distribution of speaking turns.

This analysis is not per se a criticism of all doctor-patient interactions. Normal conversation could be much less efficient than the doctor-patient interview format in many cases. However, patient responsibility and also rapport with patients are also concerns from legal and ethical perspectives. So, awareness of communication that accomplishes patient participation and rapport building is of interest. Additionally, many doctors are interested in communication, and some are more communicatively accessible to patients than others, but these are not necessarily typical doctors. Also, we can infer that patients who have more education and higher socio-economic status have more possibilities to assert themselves when talking with health care providers. These patients have more than normal conversation skills (through educational and social experience) and they know how to "talk more like doctors" at least in the sense of register.

The purpose has been to increase awareness of these linguistic, sociolinguistic and social elements, and to understand them in the context of normal conversation patterns compared with health care encounters. Many interactions may be smooth, but where interlocutors have concerns, this information may offer some insight as to what types of intervention might be attempted. Specifically, awareness of turn-taking cues may allow the health care provider to go beyond simply changing terminology from technical to common in order to facilitate information exchange with patients.

The studies on which this paper is based have been done in English speaking situations, but the principles may be applicable to other languages. As life becomes more international we may not be able to anticipate every communication need or problem However, an ability to observe our communication experiences and consider the possible sources when difficulties are detected can allow us to develop communication interventions and strategies.

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Phonological Consciousness Raising Tasks for the ESP Classroom

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Abstract

This paper summarizes how to incorporate "phonological consciousness raising" in a pronunciation class for adult learners using English for business communication. Based on voice recordings of twelve English speakers from eight different countries, a series of pronunciation tasks were designed to raise learners' awareness of how English is spoken by various language groups. The paper will first begin by looking at the reasons why phonological consciousness raising can be an effective way to approach pronunciation for such learners. This is followed by an outline of the procedures for the study and the pronunciation tasks created based on the study. Finally, the paper concludes with some recommendations and implications for further development of such tasks.

Introduction

With the shift of language teaching toward a communicative methodology, the question of pronunciation's role in the communicative classroom has come under consideration. Some will say that pronunciation basically has become irrelevant to the goals of the communicative classroom, while others like Rita Wong (1985) will argue quite the opposite:

> ...if we look closely at the components of the communicative process, we will see that pronunciation is one of the more important means by which we achieve our communicative objectives (p. 227).

In support of Wong's statement above, I agree that pronunciation does play an important role in communication and therefore deserves attention in the classroom. The main question however is in what ways should pronunciation be handled in the classroom so that our learners are consciously aware of how pronunciation can help or prevent one from achieving their communicative objectives. It is this concern that prompted me to look more carefully at the role of pronunciation instruction with my learners.

All of my learners are adults working for a major U.S. company that conducts business all over the globe. Many of their coworkers are from various countries. Therefore, English is needed for meetings, presentations, phone calls, and general on the job communication. It is fair to say that all of my learners have had at least 8 years of English language instruction. I consider their overall pronunciation good enough to communicate with few major communication breakdowns. Breakdowns generally occur due to lack of speaking and listening fluency. Therefore, I had to consider in what ways could we address pronunciation in the classroom. Traditionally, I have only addressed individual segmental or supra-segmental errors that caused breakdowns in their communication. Such breakdowns were few and far between. As for their perception and comprehension of sounds, they did not seem to have any major difficulties understanding me. Therefore, we can say that in the classroom we were successfully achieving our communicative objectives.

However, when the same learners used English on the job with coworkers from other countries, various breakdowns occurred. Of course there are many factors that could have contributed to their difficulties in achieving their communicative objectives, but one factor that seem to stand out was simply the contrast between my 'teacher-like' pronunciation of General American English (GAE) and the various non-GAE accents they were exposed to on the job. As a result, I decided to look into ways that I could raise their awareness of how English is spoken by other language groups. My goal was not to change the pronunciation of their coworkers so that they all communicated with near-native accents, but rather to incorporate 'phonological consciousness raising' in the classroom of the various accents they were exposed to on the job. It is my hope that such phonological consciousness raising would improve their comprehension and thereby help these learners to successfully achieve their communicative objectives outside of the classroom as well.

Phonological Consciousness Raising

In order to support the usage of phonological consciousness raising with my learners, I considered two questions: 1) Is native-like pronunciation a goal? and 2) Should time be spent on building perceptive phonological skills in the classroom?

Question 1: Is native-like pronunciation a goal?

Theories on interlanguage phonology suggest that there is a critical period after which learners cannot achieve an "accent-free" level of pronunciation. Some researchers even go so far as suggesting that second language phonological attainment is *impossible* unless first exposed to the language at a very early age (Long, p. 268). Such hypotheses are based on maturational constraints that physiologically and cognitively prevent adults from ever acquiring native-like pronunciation. Therefore, it has been suggested that pronunciation instruction, especially in the case of learners who are past this "critical age," center around maintaining accurate enough pronunciation to allow communication to happen. Anything beyond this is generally considered instructional time that should be spent on more productive/appropriate pronunciation tasks. However, all studies up until this point regarding the critical age hypothesis have produced mixed results. According to Ellis (1994) it is possible under ideal circumstances for learners starting after this critical age to produce speech that cannot easily be distinguished from that of native speakers. Yet, regardless if it is possible or not, the question still remains – Does native-like pronunciation *need* to be a goal?

When considering this, I feel that it does not need to be a goal because my learners currently have accurate enough pronunciation to achieve their communicative purposes. Since they are all well past this "critical age" suggested by many applied linguists, time spent in the classroom trying to develop native-like pronunciation may not be time well spent. Furthermore, on the job my learners are exposed to various accented forms of English. To suggest that only native-like pronunciation should be the goal of instruction would conflict with those speakers of English in the office who do not possess native-like control of the English sound system.

Question 2: Should time be spent on building perceptive phonological skills in the classroom?

Before deciding whether or not classroom time needed to be spent on developing perceptive phonological skills, I approached a small handful of my learners and asked them what makes it difficult to understand other speakers of English such as Indians, Chinese, Phillipinos, etc. Some comments that stood out are as follows:

- *They speak English differently.*
- *Some words and phrases sound different.*
- *Not all words are clear.*

Their comments could be based on the fact that they are used to "teacher talk" and that for most of their English language instruction in school they were mainly exposed to samples of GAE and/or British Received Pronunciation (RP). These voiced concerns seemed to focus on an inability to grasp segmental and supra-segmental variants. For example, I asked the learner who stated that "*Not all words are clear,*" to give me an example. She said that for awhile she did not realize that her manager from The Philippines was saying the word "category." He pronounces the word as /kat griy/ rather then the GAE pronunciation /kat goriy/. This is a word that she is familiar with on the job, but did not understand when her manager said it simply because he pronounced it with three syllables instead of four, and stressed the second syllable rather than the first. We can say that her managers accented pronunciation did not meet her expectation of how the word would be pronounced.

Martha C. Pennington (1987) suggests the use of listening comprehension tasks to help learners bridge the gap between what she calls the "mechanical" and "meaningful" dimensions of pronunciation. In particular she points out the following.

> Listening comprehension exercises can be devised which requires students to pay close attention to *voice quality* in order to be able to correctly identify situational features such as the relationship between speakers and the purpose of the communication (1987, p. 14) (emphasis added)

Pennington's ideas fall right in line with the idea of incorporating perceptive phonological skills in the classroom. By having learners identify differences in such things as voice quality and voice characteristics, they are developing a conscious awareness of phonological variants between speakers. In other words, they are building knowledge about how familiar words pronounced by other speakers of English may or may not meet their expectations about pronunciation; hence, phonological consciousness raising.

By answering these two questions I saw the inherent value in spending some classroom time raising my learners awareness of phonological differences and thereby improving their ability to achieve their communicative objectives on the job.

Procedures for Collecting Voice Samples

Twelve people volunteered to have their voices recorded on tape for the purposes of this study. The breakdown of participants are as follows: 2 male Indians, 2 Phillipinos (1 male and 1 female), 2 Americans (1 male and one female), 2 British (1 male and 1 female), 1 male Australian, 1 male Taiwanese, 1 male Chinese, and 1 female Japanese. These people were quite eager to participate because they have experienced communication breakdowns which they feel could be partly attributed to how they sound when speaking English. It is important to note that the Americans, British, and Australian participants were included mainly for the purpose of comparing GAE and RP to other forms of non-native accented English. (Comparative pronunciation tasks will be outlined later in the paper.)

Basically, the 12 participants were asked to record their voice while reading a prepared transcript. The transcript is of the opening of a business meeting in where the meeting leader needs to make three general announcements before starting the discussion. (See Appendix I) When preparing the transcript I considered the following three points:

1. To make the recording sound "authentic," words were not pre-selected for the purpose of eliciting contrastive phonemes. I simply wrote what might typically occur at the opening of a meeting.
2. To downplay the effect of unfamiliar technical or specialized vocabulary on comprehension, I assumed that all words would be familiar to the learners since the words are typically heard and used around the office.
3. To eliminate a lack of background knowledge or situational constraint on comprehension, I used a meeting as the context for the transcript since all learners have had experience using and listening to English in meetings.

Therefore, it was my intention that most comprehension problems would simply be due to phonological confusion over voice quality and voice characteristics as opposed to vocabulary, grammar, or lack of schema.

When recording, the participants were instructed not to practice (they were allowed only one "silent reading" before recording), not to alter their speaking speed or pronunciation and speak as they normally would, and to continue speaking even if they made a mistake. If they had any questions regarding how to say a word after their silent reading, I told them to pronounce it "*the way they thought it should be pronounced.*" Basically, I wanted to eliminate "staged" or "rehearsed" recordings.

The final order of the voices on the tape are as follows: 1) Indian male, 2) Chinese male, 3) Taiwanese male, 4) Japanese female, 5) Filipino female, 6) Filipino male, 7) Indian male, 8) British male, 9) British female, 10) Australian male, 11) American male, 12) American female.

Phonological Consciousness Raising Tasks

What follows is an outline of some phonological consciousness raising tasks using the 12 recordings. I have divided the tasks into two groups: comparison-based tasks and comprehension-based tasks.

Comparison-Based Tasks

The main purpose of the comparison-based tasks is to raise learners awareness of the differences between GAE, RP, and other accented forms of English as spoken by non-native speakers whose second language is English. One of the comparison tasks outlined below even has the learners compare their production of the transcript with native speakers. It is important to note that the comparisons are not used for production purposes. (See Appendix II for a copy of the tasks.)

Task 1) Comparing GAE with RP: In this task, the learners listen to the two speakers of GAE and the three speakers of RP (2 British and 1 Australian) and try to identify words that "sound different" between the speakers.

Task 2) Comparing GAE and/or RP with non-native speakers: In this task, the learners listen to the GAE or RP speakers and three different non-native speakers. Likewise, they try to identify differences between the speakers sounds.

Task 3) Comparing the learners' speech with native speakers: In this task, the learners have the chance to record their own voices and have it compared with native speakers' recordings. In this way, learners can discover if they are intelligible or not as compared with native speakers. The purpose here is not to enforce 'native-like' sounds, but rather to see where possible breakdowns may occur due to pronunciation.

For all three of these tasks, the learners can be instructed to look at differences in both segmentals and supra-segmentals. The value of doing such comparative tasks is simply to allow learners to see that native-like speech is not a goal, but rather understandable pronunciation.

Comprehension-Based Tasks

The main purpose of the comprehension-based tasks is to see how comprehension of English can be affected by differences in voice quality and voice characteristics of non-native speakers of English. For the tasks summarized below, the recorded voices of the American, British, and Australian speakers are not used for comprehension purposes. As mentioned previously in this paper, all of my learners have been exposed to native speakers of GAE and RP for most of their English language education. Comprehension problems on the job with such speakers is mainly due to speed - native speakers speaking too fast. However, comprehension problems with non-native speakers are mainly due to differences in pronunciation, specifically voice quality and voice characteristics affected by non-native speakers' accented English. (See Appendix III for a copy of the tasks.)

Task 1) *Summarizing*: In this task, learners are divided into pairs or small groups. Each pair/group listens to one sample only one time. They are then instructed to write down the three announcements that the speaker gave. Next, the pairs/groups listen to a different sample in order to confirm and/or pick up information that they missed with the first sample. This continues for one more sample. The pairs/groups finally join another pair/group to compare their summaries and look for points of unintelligibility.

Task 2) *Word Recognition*: This task is based on the same concept in the summarizing task above, but rather than writing down what they heard, the learners will fill in empty blanks on a copy of the transcript provided to the class. The words selected for deletion are based on predictions that the teacher feels will lead to unintelligibility. For this task, I listened to each sample for common words or phrases that might cause phonological confusion with my learners. The interesting thing about this task is that learners can try to make educated guesses about what the speaker said based on the surrounding discourse in the transcript. This to me is a valid phonological coping strategy for learners when they are actually communicating on the job.

Task 3) *Identifying Voice Quality & Characteristics*: In this task the learners are provided three to four copies of the complete transcript. Three to four non-native voice samples are then selected by the teacher for listening. While listening to each sample, the learners are instructed to follow along with the transcript and do one or all of the following:

a. Focus on stress, rhythm, and intonation patterns - For each sample, the learners can circle stressed words, mark where the speakers pause, etc.
b. Focus on 'different' words - For each sample, the learners can circle any words or phrases that are hard to understand. Learners are simply instructed to identify areas that are incomprehensible.
c. Focus on level of difficulty - The learners listen to each sample and rank them according to difficulty and ease of comprehension. They also need to explain and cite specific reasons why a particular sample is difficult or easy to understand.

Conclusion and Recommendations

As of now, the six tasks created for this study have not been used in the classroom. Therefore, it is not possible to draw any pedagogical conclusions and recommendations about the effectiveness of phonological consciousness raising for instructional purposes. However, it is possible to draw from some insight regarding the materials used for the task, namely the voice recordings. I have identified the following areas that could have an effect:

1) *Reading the Transcript*: Although for the most part the recordings sound "natural," the participants are not being recorded in actual on-line communication. Also, because they are consciously aware of being recorded, their speech may not be as natural as it would be in a real meeting. Even though the participants were instructed to read the transcript as they normally speak, some linguists have pointed out the mere nature of reading results in more accurate pronunciation because the production is more formal, self-conscious and monitored. (Labov 1972, Dickerson & Dickerson 1977)

2) *Level of Previous Experience Communicating with Non-native Speakers*: This is especially a factor for the native English speakers who participated in the study. Living and working in Japan from a period of one to three years has most likely had an effect on their own pronunciation of English. Typically native speakers who communicate with non-native speakers begin to speak more slowly, use less reductions and enunciate their words more clearly all as preventive measures against communicative breakdowns. One American participant even asked me if she should

speak as if she were really opening a meeting with her Japanese subordinates since in such a situation on the job she would speak differently.

Even though I have not yet put phonological consciousness raising to use in the classroom, I strongly believe it will prove to be a useful way to facilitate comprehension based pronunciation learning for my learners or any group of learners who need to comprehend English as it is spoken by various speakers of the language.

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Appendix I

Transcript

Directions: Please read the following information into the tape recorder. Speak as you normally would. In other words, do not try to alter your speed or pronunciation.

Ok. Thanks for coming to today's category management team meeting. I know that you are all busy so we'll try to keep this meeting within an hour.

Before we begin today's discussion I have a few general announcements to make.

First, as you are all the contact people for your categories, please make sure that you summarize today's discussion to your people. What we decide today will have a direct impact on their projects.

Second, as you all should know, our annual Technical Symposium is only a month away. The theme this year is, 'New Product Initiatives for the year 2000' I strongly suggest that you encourage some of your people to present their breakthrough ideas.

And finally, unfortunately this will be my last meeting as the category management team chairperson. From next month, Carla Baum will take over as the new chairperson.

OK if there aren't any questions, let's begin.

Appendix II

Comparison-Based Tasks for Phonological Consciousness Raising

Task 1: You will listen to different speakers opening a business meeting. Each speaker is saying the same thing, but they may sound a little different.

Listen to Speakers 8 - 12 on the tape. After listening to all 5 speakers, go back and first compare Speaker 8 with Speaker 11. Then compare Speaker 9 with Speaker 12. As you compare, use the transcripts given to you by the teacher and circle words/phrases in the transcripts that sound different. In other words, what word(s) are said differently by each speaker.

Task 2: You will listen to different speakers opening a business meeting. Each speaker is saying the same thing, but they may sound a little different.

Listen to Speakers 1, 2, 3 and 11 on the tape. After listening to all 4 speakers, go back and compare speakers 1, 2 and 3 with speaker 11.

As you compare, use the transcripts given to you by the teacher and circle words/phrases in the transcripts that sound different. In other words, what word(s) are said differently between Speaker 1 and 11, Speaker 2 and 11, and Speaker 3 and 11.

Task 3: Record your own voice opening the same business meeting. DO NOT practice reading before recording your voice. Only read the transcript ONE time to yourself. When you are through, switch your recording with a partner. Then, compare your partners recording with the native speakers of English on the tape, Speakers 8 - 12. Circle words(s) on the transcript that sound different. Your partner will do the same with your recording. When you are both through, share your comparisons with each other.

Appendix III

Comprehension-Bases Tasks for Phonological Consciousness Raising

Task 1: You and a partner will listen to three different speakers opening a business meeting. Each speaker is saying the same thing, but they may sound a little different. With a partner listen to Speaker 1 on the tape. You can only listen to the speaker ONE time. After you are listen, work with your partner and write down the three announcements that the speaker says. Use the space below.

It is not necessary to write down every word that the speakers says. A brief summary is OK. Do not worry if you are unable to write down what was said. Simply listen to Speaker 2. After listening to the second speaker, make changes and/or add to your summary.

Continue this until Speaker 3. After this speaker, work with another pair of students and compare your answers. Check for areas that were hard to understand.

Announcement 1:

Announcement 2:

Announcement 3:

Task 2: You will listen three different speakers opening a business meeting. Each speaker is saying the same thing, but they may sound a little different.

As you listen to Speaker 1, fill in the missing words in the transcript below. Do not worry if you miss some words. You will have a chance to pick up the words you missed while listening to Speakers 4 and 5. If you are not sure of what you heard, take a guess!

OK. ________ for ________ to today's category management team meeting. I know that ________ busy so we'll try to keep this meeting ________.

________ we ________ today's discussion I have a few general ________ to make.

________, as you are ________ the ________ for your ________, please make sure that you summarize today's discussion to your ________. ________ decide today will have a ________ impact on their ________.

Second, as you ________ should know, our ________ is only a month away. The ________ this year is, "New ________" for the year ________ I ________ suggest that you encourage some of your people to ________ their ________ ideas.

And finally, ________ this will be my last ________ as the category management team ________. From next month, ________ will take over as the new chairperson.

OK if there ________ questions, let's begin.

Task 3: You will listen to three different speakers opening a business meeting. Each speaker is saying the same thing, but they may sound a little different. For each speaker you will be given two copies of a transcript of what is said. Therefore, you should have a total of 6 transcripts.

For the first three transcripts do the following: Listen to Speakers 3, 4, and 5 and as you listen to each speaker do two things to your transcripts. 1) circle words that are stressed by the speakers. In other words, circle the words that sound louder or stronger. 2) mark with slashes (/) the points were the speakers pause.

For the last three transcripts do the following: Listen to Speakers 3, 4, and 5 again. As you listen to each speaker circle the words on the transcript that sound different from what you think they should sound like. In other words, circle the words that are not clear to you.

Finally, rank these three speakers on the scale below. Be prepared to explain your rankings:

Difficult

Speaker # ___. Why?

Speaker # ___. Why?

Speaker # ___. Why?

Easy

Integrating ESL into the Art History Classroom

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Introduction

Content-based English classes can provide a meaningful context for the acquisition and development of English language skills. This paper provides guidelines for creating content-based units for a first-year introductory art history course at an international college. Two ESL instructors were asked to provide English language materials to help Japanese students at a low level of English proficiency in a course being taught by a native-English-speaking professor. The goals were to help the students master and reinforce their knowledge of art history concepts while simultaneously helping them build their vocabulary and develop the skills to process information, think critically, and communicate meaningfully in speaking and writing. The instructors wanted to help the students succeed in their art history course and yet also provide them with activities and experiences useful in developing language, academic, and study skills transferable to future courses. In teaching the course, several useful principles emerged which are discussed below.

Guidelines for Creating Content-Based Units

Course Objectives

First of all, it was important to determine both art history objectives and language objectives by

a) identifying ideas and concepts in the art history material and planning ways to help students process the material. For example, one of the most important concepts in art history was the idea of change over time. Texts and lectures continually emphasized contrasts between art from one period with that of a later period (Greek vs. Roman, Romanesque vs. Gothic, etc.). Therefore, one objective was to teach students terms of comparison and contrast and how to write paragraphs comparing and contrasting specific buildings (such as the Parthenon and the Pantheon) and paintings (such as "The Creation of Adam" and "The Last Judgment" in the Sistine Chapel).

b) analyzing texts used in the discipline for language features such as commonly-occurring grammatical patterns and structures. In this case, the instructors found that art history texts are full of passive structures, relative clauses (used in descriptions of art), and adjective/noun complements containing the language of judgment ("She considered the painting beautiful."). Therefore, one objective of the course was to help the students understand and use language containing these grammatical features.

Next, it was important to sequence the instructional material and plan ways to implement the unit. In this case, the units mirrored those of the content teacher – Egyptian art, Greek, Roman, the Middle Ages, the Renaissance, Neo-Classicism, Impressionism, etc. For motivational purposes, the instructors linked activities and assignments as closely as possible to assignments made by the art history instructor. When students saw a clear relationship, they were more likely to perceive ESL assignments as relevant to their needs. Since the art history professor required the students to take essay tests at the end of each unit, writing assignments by ESL instructors were also seen as valuable learning activities.

However, it was a good idea to balance the above principle with the provision of activities which helped students develop transferable skills. The content and ESL instructors spent equal amounts of class time with the students, but it was not possible to utilize all of the content material covered in ESL activities. Using activities which emphasized the development of general language skills that would be needed in other courses as well seemed the best use of time.

Also, balancing activities with an academic focus with those which encouraged students to enjoy and react to art and express their ideas and opinions informally strengthened the effectiveness of the course as a whole. The instructors usually tried to provide a communicative purpose for listening, reading, writing, speaking, and using particular vocabulary or grammatical structures. Such activities were the basis for heightened motivation in the class at large. Art in particular often evokes an emotional response which can be capitalized upon in encouraging students to communicate both orally and in writing. For example, a simple but effective method of introducing students to art history was to have them examine portraits from various time periods on the first day. Students then had their own "portraits" taken with a Polaroid and spent time describing them both orally and in writing using newly acquired vocabulary such as "profile."

Maintaining and Raising Student Interest to Facilitate Active Learning

In the art history course, several important guidelines emerged which proved valuable in helping to increase student motivation and mastery of the material:

The instructors discovered that it was effective to plan experiential language learning activities based on the course material in which students had to interact with each other to negotiate meaning. This gave the students an active role in their course instead of the passive one that sometimes exists in a lecture-based, college class. Activities which proved particularly successful in the art history course were jigsaws, pair dictations, paired questions, and role plays, including mock interviews. Below is a brief description of each.

- *Jigsaw*

In a jigsaw, students are divided into groups. Each student in a group is then sent off to learn a set amount of information in a different group which he/she must then come back and share with the other members in the original group. The group is then tested over the complete set of information the students have shared with each other.

- *Pair Dictation*

In a pair dictation, two students have incomplete copies of a written text. Each has the information the other needs to complete the text. They take turns dictating to each other. They can then use the completed information as a reading text, process the information, and use it in a follow-up activity.

- *Paired Questions*

With paired questions, one student is provided with only the first half of a text and a list of questions about the second half while the other student is given the second half of the text and a list of questions about the first half. The students take turns answering the questions of the other so that eventually each student has all the salient information.

- *Role Plays*

In role plays, students take on the roles of artists or of people from societies of the period being studied (for example, a medieval king, merchants in the cathedral town of Chartres, a priest, and the pilgrims traveling to the cathedral). As students interact with each other, they are able to consolidate their knowledge of a period of art.

Recycling activities also proved effective. Repeating the same types of activities in different units helped students to feel comfortable. Once they knew how to do an activity, they were at ease and could concentrate on the new language and concepts they were trying to learn. In this case, the instructors developed the same kinds of jigsaws, pair dictations, and other activities which seemed to be effective at several different times for various units in the course.

Thirdly, for learners in the earlier stages of proficiency, the instructors realized that it was important to structure and focus the assignments as completely as possible. It was essential to remember not to expect students to engage in free discussions of topics without first providing them with the vocabulary, structures, and background knowlege necessary to do so. Often a guided activity such as a pair dictation could serve as a means for listening and speaking more effectively than a free discussion to which lower level students would have had difficulty contributing. Likewise, limiting the content freed students to focus on important concepts. For example, in the Renaissance unit, the instructors chose a short reading which discussed only two paintings in the Sistine Chapel, "The Creation of Adam" and "The Last Judgment." More general concepts regarding history and society were then drawn by looking specifically at these two paintings. In general, the students in the class were able to open up and participate more when the assignments were structured and focused as specifically as possible.

Linking the abstract to the concrete with visuals and incorporating as many different multimedia resources as possible into the curriculum was also a valuable guideline. The instructors tried to expose students to the same ideas several times in as many different forms as possible. Art history lends itself naturally to this. By its very nature, it is rich in visual imagery, and relevant slides, CD-Roms, the Internet, videos, and music could easily be found. Popular activities in the class included surfing the Internet for information about Renaissance artists and compiling it in a chart generated in Microsoft Word and a video with a song from a musical entitled "Sunday in the Park with George" in which the characters in a painting come to life and begin complaining to their painter about being stuck in such uncomfortable poses. Watching the video served as a basis for expansion to other, related, language activities such as pretending to pose the students in a painting and discussing what this felt like, a pair dictation with background information, a cloze activity while listening to the song, and an inferencing activity in which students compared who said what in the song and thus were able to infer who was who in the painting.

Linking the curriculum to current events also proved effective in getting students interested in the subject. At the very beginning of the course, articles and news clips about the finding of some ancient cave paintings in France were prominent in the news, so these were incorporated into the class and generated a high level of interest.

Another useful principle was to encourage students to contribute to the curriculum. In one unit, the art history professor had been explaining the influence of Japanese woodblock prints on Impressionism, and when an enterprising student showed the instructors a website for the Ukiyoe (Woodblock Print) Museum in Nagoya which he had come across while surfing, they utilized it in the next class in a skimming/scanning activity.

It was also important to allow student needs and interests to surface. For one assignment, students were encouraged to choose a work from the later Neo-Classic or Impressionist periods, but one student was particularly taken with a Renaissance painting which he had studied in high school as well. Since he seemed so fascinated with it, the assignment was modified to include works from earlier time periods.

Finally, it was important to plan for evaluation of learning. Such assessment did not necessarily have to be formal, but the instructors constantly monitored for feedback which allowed them to see what their students had learned successfully. Students also benefited when they could see they were making progress in concrete ways. This particular course culminated in the completion of a collaborative class project, a tangible expression of what the students had learned. Near the end of the art history course, each student chose a slide for an oral report or mini-lecture to the rest of the class. Students were encouraged to use structures which had been emphasized, such as passives and relative clauses. After the reports, each student wrote a written summary which became the basis of a news article in a student-produced newspaper called *The Art History Times*.

Conclusion

The curriculum evolved over the course of the semester as the instructors strove to develop a curriculum based on the students' needs and interests in a particular course. Art history proved a particulary rich and fertile subject which was easily exploitable for language learning purposes. However, the guidelines stated above could be applied in creating content-based courses for other disciplines or subjects as well.

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